INCREASING JOY IN MEDICINE

AMERICAN MEDICAL ASSOCIATION | CANADIAN MEDICAL ASSOCIATION | BRITISH MEDICAL ASSOCIATION

ICPH 2016 | INTERNATIONAL CONFERENCE ON PHYSICIAN HEALTH™
Oral presentations

Sunday, September 18, 2016
10:30am – 11:30am

Note: All presentations may not be included as we are still collecting the final presentations from presenters, some may have been omitted for copyright purposes. Check back periodically for updates.
Medical school predictors of later perceived mastery of clinical work among Norwegian doctors: A 20-year prospective study

Anna Belfrage, MS¹,², Kjersti Støen Grotmol, PhD²,³, Lars Lien, PhD¹, Reidar Tyssen, PhD²

¹Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders, Innlandet Hospital Trust, Brumunddal, Norway
²Department of Behavioural Sciences in Medicine, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo, Norway
³Regional Centre of Excellence in Palliative Care, Department of Oncology, Oslo University Hospital, Norway
Perceived Mastery

The feeling of having handled a demanding situation well
Being a doctor

- High levels of stress
- Risk of developing psychological disorders
- May influence work performance and patient care
A sense of mastery

• Reduces stress
• Handle high demands
• May protect against psychological disorders
Aim

To study predictors in medical school of later perceived mastery of clinical work among doctors.
Perceived Mastery

10 years later

Predictors
at final year
of medical school

Perceived Mastery

20 years later
Sample: The Longitudinal Study of Norwegian Medical Students and Doctors (NORDOC)

- All students graduating from medical school 1993/94 (N = 631) - surveyed
- 83% (522/631) responded
- Mean age 28 (2.8); 53% women
- 71% (371/522) – 10th postgraduate year (2003)
- 55% (289/522) – 20th postgraduate year (2014)
Outcome variable

Perceived Mastery of Clinical Work

• 4 items
• Likert scale 1 – 7

• “I have sufficient knowledge and experience to do a good job as a physician”
• “I communicate without problems with patients and their next-of-kin”
• “I manage to establish collaboration with patients who are poor collaborators to begin with”
• “I experience that I master the professional aspects that my work demands of me”
Predictors at medical school

Medical school factors

• Medical School Stress
  – 13-items
  (Vitaliano et al 1989)

• Medical recording skills
  – 6 items
  (Tyssen et al 2000)

• Identification with the role of doctor
  – 4 items
  (Gude et al 2005)
Predictors at medical school

Alcohol habits

- **Hazardous drinking**
  - 60 g of ethanol (appr. 5 alcoholic units) on the same occasion at least 2–3 times per month

- **Drinking to cope with tension**
  - “when you feel worried, tense, or nervous, do you ever drink alcoholic beverages to help you handle things?”

(Timmer et al 1984)
Predictors at medical school

Personality

- 36-item Basic Character Inventory
  (Lazare et al 1966, Torgersen 1989)
- Vulnerability
- Intensity
- Control
- Reality weakness
Design
Perceived Mastery measured 2003 (T2)

Predictors
measured final year of medical school
1993/94 (T1)

Perceived Mastery measured 2014 (T3)
## Results – 10 years (T2)

<table>
<thead>
<tr>
<th></th>
<th>1993/94</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording skills</td>
<td>0.13 (0.02 to 0.24)*</td>
<td>0.16 (0.05 to 0.28)**</td>
</tr>
<tr>
<td>Role identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol to cope</td>
<td>-2.45 (-3.88 to -1.03)**</td>
<td>Perceived Mastery of Clinical Work</td>
</tr>
</tbody>
</table>

*Statistically significant at the 0.05 level
**Statistically significant at the 0.01 level
Predictors of perceived mastery at T2
Effect sizes and standardized beta values

R^2_adj = .15

Sociodemographic
- Age
- Gender

Personality
- Vulnerability
- Intensity
- Control
- Reality weakness

Medical school factors
- Medical school stress
- Medical recording skills
- Role identification

Alcohol habits
- Hazardous drinking
- Drinking to cope

R^2_adj = .007
R^2_adj = .008
R^2_adj = .045
R^2_adj = .028

p < .001***, p < .01**, p < .05*
Results – 20 years (T3)

1993/94

Recording skills: 0.11 (0.02 to 0.21)*

2014

Perceived Mastery of Clinical Work
Predictors of perceived mastery at T3
Effect sizes and standardized beta values

Sociodemographic
- Age
- Gender
- Personality
- Vulnerability
- Intensity
- Control
- Reality weakness

Medical school factors
- Medical school stress
- Medical recording skills
- Role identification
- Alcohol habits
- Hazardous drinking
- Drinking to cope

$R^2_{adj} = .10$
$R^2_{adj} = -.004$
$R^2_{adj} = .025$
$R^2_{adj} = .03$
$R^2_{adj} = -.005$

$p < .001^{***}, p < .01^{**}, p < .05^{*}$
Perceived medical recording skills

- Predicted at both stages
- Communication skills
- Practicing in real clinical settings
Identification with the role of doctor

• Predicted at early stage
• Need of training in complex and demanding settings
Alcohol to cope with tension

- Predicted lower mastery at early stage
- Life changes and role transitions
- Discussion on coping strategies
Implications for medical school curricula

- Medical school factors more important than personality
- Theoretical knowledge in practical setting
- Demanding situations
- Discussion on coping strategies
Strengths and limitations

- 20-year follow up, nationwide sample
- Relatively high response rates

- Self-report
- Contextual variables important
- Self-esteem confounder?
Implications for future research

• Perceived Mastery – Observed Performance?
• What characterizes increase and decrease of perceived mastery?
• Contextual factors
Conclusion

Higher sense of mastery

• Medical school predictors:
  – Recording skill
  – Role identification
  – No alcohol to cope

• Theory & practice
• Discuss healthy coping
Our research group

Kjersti S Grotmol, PhD, postdoctoral student

Lars Lien, MD, PhD, professor

Reidar Tyssen, MD, PhD, professor

Other members of the Research Team of Health Professionals
(Department of Behavioural Sciences in Medicine)

Funding: Innlandet Hospital Trust
Thank you!

anna.belfrage@medisin.uio.no
Anna Belfrage

Nothing to disclose
INCREASING JOY IN MEDICINE

ICPH 2016 | INTERNATIONAL CONFERENCE ON PHYSICIAN HEALTH™
Development, Implementation and Outcomes of an Interactive Model of Physician Wellness Self-Assessment

ICPH 2016 – Boston, MA

Presenter: Dan Cojocaru – 3rd Year Medical Student at UBC, Vancouver, Canada

Study Team: Dan Cojocaru, Erik Skarsgard, Caron Strahlendorf, Frederick Kozak, Penny Sneddon, Damian Duffy, Theresa Newlove
Dan Cojocaru

Nothing to disclose
Learning Objectives

1. Develop a working knowledge and framework for implementation of an online interactive wellness survey.

2. Describe physician wellness in the context of burnout, resilience and coping strategies in a pediatric quaternary care center compared to national benchmarks.

3. Appreciate the challenges and opportunities of developing wellness initiatives for physicians.
Project History

- Timing was ‘right’ to understand physician wellness at BC Children’s Hospital:
  - Ongoing complexity and high acuity needs of patients
  - Budget constraints
  - New Hospital Build
  - Electronic Health Record
- 2013 Project unfunded
- 2015 Medical Student Research Project funded and Revived/Modified

It is always the right time to understand and promote physician wellness
Impact of Physician Burnout

- Medical errors\(^1,2\) and decreased quality of care\(^3,4\)
- Unsafe prescribing\(^5,6\)
- Reduced patient adherence\(^7\)
- Substance abuse\(^8\)
- Suicidality\(^9\)

Project Goals

- Increase awareness of burnout and resilience factors.
- Immediate individual and peer comparison feedback.
- Current organizational profile of physician well-being.
- Input towards implementation of physician wellness initiatives.
- Access to wellness resources.
Survey Tools

BURNOUT

1. INCREASED Emotional Exhaustion
2. INCREASED Depersonalization
3. DECREASED Personal Accomplishment

RESILIENCE

1. Attitudes and Perspectives
2. Balance and prioritization
3. Supportive relationships

Maslach Burnout Inventory

Connor-Davidson Resilience Scale

Connor KM, Davidson JRT. Depression and Anxiety 2003;18(2):76-82.
Survey Methods

- Distributed by Department Heads to all residents, fellows, and active staff from Jan 15 – Feb 15, 2016
- Completion of survey optional
- $5 Starbucks gift card
- Peer led – Checking In, not Checking On
Survey Limitations

- Self-selected sample
- Seasonal Bias
- Did not explore other aspects of wellness
  - physical wellness
  - substance abuse
  - depression/suicidality
  - workplace factors (bullying, leadership)
- Limited individual longitudinal follow-up
Survey - Immediate and Interactive
RESULTS
RESULTS – Defining Burnout

Within the Subscales

Emotional Exhaustion
- Low
- Average
- High

Depersonalization
- Low
- Average
- High

Personal Accomplishment
- High
- Average
- Low

Severity of Burnout

Overall

<table>
<thead>
<tr>
<th>Definition</th>
<th>Conditions</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad</td>
<td>EE or DP or PA</td>
<td>High Overall Burnout</td>
</tr>
<tr>
<td>Restrictive</td>
<td>EE and DP and PA</td>
<td>High Overall Burnout</td>
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</tbody>
</table>
## RESULTS – Overall Burnout and Resilience

### Overall Response Rate: 130 of 330 (39%)

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<tr>
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<td></td>
<td></td>
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<td>63%</td>
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<td>20%</td>
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<td><strong>High Burnout (Broad)</strong></td>
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<td><strong>High Burnout (Restrictive)</strong></td>
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| High Burnout (Broad)              | 49%  |
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| Resilience (SD)                | 72.7 (12) |

- **High Burnout (Broad)**: 49%
- **High Burnout (Restrictive)**: 5%
## RESULTS – Medical Subspecialty

<table>
<thead>
<tr>
<th>Medical Subspecialty</th>
<th>High Burnout</th>
<th>High EE</th>
<th>High DP</th>
<th>Low PA</th>
<th>Resilience (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Peds (n = 32)</td>
<td>16 (50%)</td>
<td>10 (31%)</td>
<td>9 (28%)</td>
<td>4 (13%)</td>
<td>73.1 (10)</td>
</tr>
<tr>
<td>Anaesthesiology (n = 7)</td>
<td>1 (14%)</td>
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<td>0</td>
<td>79.3 (12)</td>
</tr>
<tr>
<td>Radiology (n = 6)</td>
<td>6 (100%)</td>
<td>5 (83%)</td>
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<td>4 (67%)</td>
<td>59.7 (18)</td>
</tr>
<tr>
<td>Emergency (n = 3)</td>
<td>1 (33%)</td>
<td>0</td>
<td>0</td>
<td>1 (33%)</td>
<td>69.3 (9.1)</td>
</tr>
<tr>
<td>Pathology (n = 3)</td>
<td>2 (67%)</td>
<td>0</td>
<td>0</td>
<td>2 (67%)</td>
<td>69.0 (4.0)</td>
</tr>
<tr>
<td>Hem/Oncology (n = 3)</td>
<td>2 (67%)</td>
<td>1 (33%)</td>
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<td>0</td>
<td>77.3 (20)</td>
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<tr>
<td>Adolescent Med (n = 2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>71.0 (0)</td>
</tr>
<tr>
<td>Critical Care (n = 2)</td>
<td>2 (100%)</td>
<td>1 (50%)</td>
<td>1 (50%)</td>
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</tr>
<tr>
<td>Infectious Diseases (n = 1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>85.0 (-)</td>
</tr>
<tr>
<td>Gastroenterology (n = 1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>82.0 (-)</td>
</tr>
<tr>
<td>Endocrinology (n = 1)</td>
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</table>
## RESULTS – Comparison to Other Centers

<table>
<thead>
<tr>
<th>Population</th>
<th>Year</th>
<th>N</th>
<th>Response Rate (%)</th>
<th>High EE</th>
<th>High DP</th>
<th>Low PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatricians at BCCH</td>
<td>2016</td>
<td>130</td>
<td>39%</td>
<td>30%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Adult Oncologists¹ (Canada)</td>
<td>2000</td>
<td>122</td>
<td>71%</td>
<td>53%</td>
<td>22%</td>
<td>48%</td>
</tr>
<tr>
<td>Pediatric Oncologists² (Canada)</td>
<td>2011</td>
<td>54</td>
<td>40%</td>
<td>24%</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Pediatric Oncologists² (USA)</td>
<td>2011</td>
<td>229</td>
<td></td>
<td>30%</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Pediatric Intensivists³ (Brazil)</td>
<td>2014</td>
<td>35</td>
<td>N/A</td>
<td>63%*</td>
<td>40%</td>
<td>34%*</td>
</tr>
<tr>
<td>Pediatric Generalists³ (Brazil)</td>
<td>2014</td>
<td>35</td>
<td>N/A</td>
<td>26%*</td>
<td>9%</td>
<td>0%*</td>
</tr>
<tr>
<td>Pediatric Residents at beginning of PGY1⁴ (USA)</td>
<td>2014</td>
<td>108</td>
<td>100%</td>
<td>6%*</td>
<td>13%*</td>
<td>9%</td>
</tr>
<tr>
<td>Pediatric Residents at end of PGY1⁴ (USA)</td>
<td>2014</td>
<td>86</td>
<td>83%</td>
<td>44%*</td>
<td>48%*</td>
<td>16%</td>
</tr>
<tr>
<td>Colorectal Surgeons⁵ (UK)</td>
<td>2007</td>
<td>252</td>
<td>56%</td>
<td>31%</td>
<td>17%</td>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wellness Strategy</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I engage in recreation/hobbies/exercise</td>
<td>86%</td>
</tr>
<tr>
<td>I engage in discussions with family or a significant other</td>
<td>80%</td>
</tr>
<tr>
<td>I try to take a positive outlook on things</td>
<td>72%</td>
</tr>
<tr>
<td>I regularly take vacations</td>
<td>69%</td>
</tr>
<tr>
<td>I protect time away from work with my spouse/family/friends</td>
<td>67%</td>
</tr>
<tr>
<td>I balance my personal and professional life</td>
<td>58%</td>
</tr>
<tr>
<td>I discuss stressful aspects of work with colleagues</td>
<td>58%</td>
</tr>
<tr>
<td>I am involved in professionally meaningful research activities</td>
<td>36%</td>
</tr>
<tr>
<td>I have developed an approach/philosophy to dealing with death/end of life care</td>
<td>35%</td>
</tr>
<tr>
<td>I nurture the religious/spiritual aspects of myself</td>
<td>28%</td>
</tr>
<tr>
<td>I regularly engage in the practice of mindfulness</td>
<td>16%</td>
</tr>
<tr>
<td>I receive regular support from a mental health care professional</td>
<td>8%</td>
</tr>
</tbody>
</table>
### RESULTS – Qualitative Feedback

<table>
<thead>
<tr>
<th>Wellness Resource</th>
<th>Aware</th>
<th>Used/Aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Health Program of BC (PHP)</td>
<td>53%</td>
<td>20/69</td>
</tr>
<tr>
<td>PHSA Employee and Family Assistance Program (EFAP)</td>
<td>33%</td>
<td>7/43</td>
</tr>
<tr>
<td>Resident Wellness Office at VGH</td>
<td>26%</td>
<td>9/34</td>
</tr>
<tr>
<td>PHSA Wellness Workshops</td>
<td>8%</td>
<td>0/10</td>
</tr>
<tr>
<td>LifeSpeak</td>
<td>2%</td>
<td>0/2</td>
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</table>
## RESULTS – Qualitative Feedback

<table>
<thead>
<tr>
<th>Qualitative Comments</th>
<th>N = 39</th>
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<tbody>
<tr>
<td>Onsite Fitness Center</td>
<td>13 (33)</td>
</tr>
<tr>
<td>Mindfulness Training</td>
<td>7 (18)</td>
</tr>
<tr>
<td>Administrative Support</td>
<td>5 (13)</td>
</tr>
<tr>
<td>Resident Support Programs</td>
<td>3 (8)</td>
</tr>
</tbody>
</table>
Challenges and Lessons Learned

- Physician Participation
- Administrative Involvement and Concerns
- What do we do with the data?
Future Direction

- Increase awareness of **currently available** wellness initiatives/resources - **ONGOING**

- Begin process of implementing or developing **requested** wellness initiatives - **ONGOING**

- **Follow up survey** - 90% of respondents indicated they were willing to complete a one-year follow up 
  January 2017

- Maintain supportive and open discussions about burnout and physician wellness – **act as an educational hub**
Acknowledgments

Physician Wellness Team
  PI: Theresa Newlove
  Team: Erik Skarsgard, Caron Strahlendorf, Frederick Kozak, Penny Sneddon, Damian Duffy, Doug Courtemanche

Department Heads

Residents, Fellows and Physicians at BCCH

THANK YOU!!!
The Resilient Physician: Individual strategies to Promote Whole Physician Health

September 18, 2016
Elizabeth Lawrence, MD, FACP
Catherine Cheng, MD, FACP
Disclosures

We have no disclosure or conflicts of interest
Objectives

By the end of this workshop, participants will be able to:
1. Describe the three general strategies of resilient physicians
2. List resiliency tools to use in everyday clinical practice
3. Practice 2 resiliency tools to promote whole physician health
Introduction

What is burnout?

What is physician wellness?

What is resiliency?

What is whole physician health?
Introduction

What is burnout?
• Exhaustion, cynicism, lack of efficacy

What is physician wellness?
• Multiple dimensions
• Thriving, not just surviving
Introduction

What is resiliency?
Introduction

What is resiliency?

- Ability to maintain stability in spite of adversity
- May not know you have it until tested
- A process that can be taught/learned - not just a trait
- Includes preventive and corrective

Introduction

What is whole physician health?

- The whole person of the physician, as well as our milieu
- Term to discuss, explore, define together as we come up with way to discuss all aspects of wellness, all factors that impact it
Introduction

Individual

Institutional
Introduction Exercise

What is one tool you currently use to promote resiliency?

(resiliency tool = an activity or practice you engage in to promote wellness or to reduce burnout)
Strategies of Resilient Physicians

• Find meaning in work
• Self awareness - know values and priorities
• Establish clear boundaries between work and home
Group Exercise

How do the tools we have identified fit in these categories?
Additional thoughts on resiliency tools?
Strategies of Resilient Physicians

Finding meaning in work:
• Patient-doctor relationship
• Mentoring, teaching
• Administration, working for systems improvement
• Research
• Professional development
• Refocusing practice
• Colleagues/teams
Strategies of Resilient Physicians

Knowing values/priorities:
- Reflection - journaling, Balint group, FMM, therapy
- Mindfulness
- Workshops
- Spirituality
- Family input
- Daily gratitude
- Self-assessments
Strategies of Resilient Physicians

Clear boundaries/limits
- Limiting electronic access
- External limitations
- Saying no
- Scheduling time for personal care
- Rituals
- Pause
Resiliency Tool: Practice 1

Reflection:
What surprised you?
What touched you?
What inspired you?
Resiliency Tool: Practice 2

Knowing values and priorities:
Value card sort
Objectives

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Conclusions and Closing Exercise

The language of affirmation: I will, I can, I am
Heather Lochnan

Nothing to disclose
Uncovering Work Related Physician Stressors; Unintended Benefits of a Strategic Planning Exercise at an Academic Health Science Center

Heather Lochnan, Edward Spilg, Philip Wells
The Department of Medicine, University of Ottawa
Ottawa, Canada
Stress / Burnout /Well Being and Safety

- Patient Safety Incidents are linked to burnout and indicators of high stress (cause or effect?)
- Addressing work related concerns that contribute to stress and burnout may improve quality and safety.
- Therefore uncovering environmental factors that contribute to stress, burnout, overwork, fatigue of many physicians should be encouraged.
Background

- A strategic planning exercise involving members of the faculty of medicine was undertaken to identify priorities.
- Concept mapping methods were employed to encourage faculty participation in identification of the challenges facing the department of medicine.
- Concept Mapping enables broad stakeholder participation efficiently and rapidly with minimal cost.
Purpose of this study

- Involve stakeholders in a participatory exploration of their views on the major challenges faced the Department of Medicine
- Develop a conceptual framework to better understand the perspectives of our membership in regard to priorities and concerns through a comparative analysis.
- Prompted to consider physician wellness, this was considered a secondary issue receiving attention as relates to issues around safety.
Methods

• The concept mapping approach provides a structured analysis of a collaborative conceptualization of the challenges facing our faculty members that can inform strategic initiatives to address priority concerns.
Why Concept Mapping?

- Participatory; involving stakeholders in the development of a collaborative conceptual framework.
- Initial brainstorming is done anonymously online, in a virtual forum where faculty can see what others have written.
- Mixed method; qualitative and quantitative
- Visual maps illustrate areas of consensus and importance that aid strategic planning.
Issue to be Addressed

• The major challenges facing the Department of Medicine that should be addressed over the next five years are…

• Consider within the context of the areas of quality and safety, education, research, clinical programs, IT, physician wellness & promotion, communications, and others.”
Idea Generation

- Email invitation was sent to faculty in the DoM 325 statements were posted on the web based forum anonymously
There has been tremendous dumping of administrative work onto physicians by the hospital. This impacts teaching programs, job satisfaction of doctors. I.T. has forced changes with little thought or empathy about impact on physicians.

In regards to challenges to be addressed in the department:

“promote wellness by emphasizing work life balance”
In regards to challenges to be addressed in the department:

- The pressures of clinical practice greatly diminished collegiality and professionalism of Dept. members. Some services appear to resent patient care obligations and communicate this ...
- Physician Wellness: it is now time to walk the talk
- …there is little (in way of initiatives) for true promotion of physician wellness
- Administrative workload is excessively high
- Need more emphasis on work life balance
- Patient load overwhelming…
- Not enough time to finish clinical duties.. No time for family and is destructive
- Physicians are not engaged or passionate about work. how can we light that spark again?
In regards to challenges to be addressed in the department:

- Forced clinic shut downs increase health care provider stress and reduce work place satisfaction
- Physicians are spending more time on administrative tasks and less time with patients.
- Wellness promotion is a nice idea….but day to day there is no balance with competing responsibilities at home and work.
- Need to protect physicians at risk of burnout in light of reduced work hours for residents
- Need on site availability of physicians to dept. members as well as psychosocial support
- Reduce physician “change fatigue”
Structuring the Ideas

Demographics:

- Gender
- Years in Practice
- % time in clinical work
- Academic Rank
- Dept. of Medicine
- Dept. of Surgery
Structuring the Ideas

Rate the ideas
Importance (Priority)

<table>
<thead>
<tr>
<th>Lowest</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Highest</th>
</tr>
</thead>
</table>

96 participants completed the rating of 55 statements
Patient volumes are increasing while operational resources are decreasing. 5.6
Physicians are losing bedside and face-to-face contact with patients (e.g. IT, Clinical workload). 5.3
Many physicians struggle with balancing workloads (e.g. Clinical, Research, Teaching, Admin, Life). 5.1
Many workflows and processes are inefficient, complicated, taxing and/or non-standardized. 5.1
There is an excessive amount of paperwork, especially on the wards, which negatively impacts teaching, research and clinical work. 5.1
Structuring the Ideas

Sort the ideas

Each participant sorts statements into themes or categories

42 participants completed the task of sorting the 55 statements into thematic groups
1. Conduct an analysis to locate each statement as a point on the map (i.e., point map)

2. Group the statements on the map into clusters (i.e., cluster map)

3. Obtain average ratings by participants for each statement and for each cluster (i.e., cluster rating map)

Software by Concept Systems Inc.
Challenges for Clinical Teachers

Point Map
Cluster Rating Map

Cluster Legend

Layer | Value
--- | ---
1 | 3.39 to 3.67
2 | 3.67 to 3.96
3 | 3.96 to 4.25
4 | 4.25 to 4.53
5 | 4.53 to 4.82

Changes that have adversely affected patient care

Patient issues
Leadership concerns
Academic collaborations
Recognizing clinical teachers
Career support
Physician well being
Departmental Leadership

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Pattern Match

Gender

Changes that have adversely affected patient care
- research
- physician wellbeing
- patient issues
- Career Support
- leadership concerns
- Academic Collaborations
- Recognizing Clinical Teachers

Career support

Departmental Leadership

MALE

FEMALE

$r = 0.88$
Pattern Match: full professor vs gender

Changes that have adversely affected patient care
Physician wellbeing
Career support
Recognizing clinical teachers
Departmental Leadership
Academic collaborations
Leadership concerns

r = 0.64
Pattern Match: Academic rank assist vs prof

Changes that have adversely affected patient care
Academic collaborations
Career support
physician wellbeing
Recognizing clinical teachers
leadership concerns
Departmental Leadership

Changes that have adversely affected patient care
research
physician wellbeing
Career support
patient issues
leadership concerns
Recognizing clinical teachers
Academic collaborations
Departmental Leadership

r = 0.59
Cluster Rating Map

Cluster Legend

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Changes that have adversely affected patient care

Patient issues

Leadership concerns

Academic collaborations

Recognizing clinical teachers

Career support

Physician well being

Departmental Leadership

Research

Leadership concerns

Academic collaborations

Recognizing clinical teachers

Career support

Physician well being

Departmental Leadership

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Physician Well-Being

- Physicians indicate they do not feel valued for their patient care and the time spent teaching trainees.
- Physicians do not feel supported during life transitions (e.g. young family, retirement, sabbatical).
- Members feel that health and wellness needs (work-life balance) are not supported.
Physician Well-Being

- Physicians feel that they are not involved in the choosing, planning and rollout of computer technology.
- Many physicians struggle with balancing workloads (e.g. Clinical, Research, Teaching, Admin, Life).
- There is a lack of office and clinical space in the institution.
- There are too many ineffective committee meetings.
- Physicians feel that they are not involved in the choosing, planning and rollout of computer technology.
Physician well-being and gender

14. Physicians feel that they are not involved in the choosing, planning and rollout of computer technology.

15. Many physicians struggle with balancing workloads (e.g. Clinical, Research, Teaching, Admin, Life).

16. Physicians do not feel supported during life transitions (e.g. young family, retirement, sabbatical).

24. There is a lack of office and clinical space in the institution.

30. There are too many ineffective committee meetings.

35. Members feel that health and wellness needs (work-life balance) are not supported.
Comparative Analysis

- Analysis by gender uncovered most differences in “challenges: determined by a comparison of mean rating scores
- Top 4 clusters (mean ratings) each ranked higher by women: including in subgroup of full professors
  1. Changes that adversely affect patient care
  2. Physician well being
  3. Patient issues
  4. Career Support
Conclusions

1. Concept Mapping methods facilitated a rapid mechanism to encourage stakeholder participation that permitted frank and anonymous input.

2. Participation in idea generation exceeded expectations.

3. Results of the comparative analysis of subsets of faculty can help leadership teams understand the unique concerns of faculty in part based on gender, rank and career path.

4. Analysis of thematic clusters helps formulate a conceptual framework that can inform customized solutions that should demonstrate to stakeholders that their input is valued.
Next Steps

➢ Results of this empirical comparative analysis has allowed us to strategically address important concerns of faculty. Thirty three teams consisting of 172 faculty volunteers are tasked to work on the priority concerns.

➢ Created a Vice Chair position to promote physician wellness in broad sense, including mentoring, valuing clinician teachers, assisting in promotion, identify and address workload concerns

➢ Develop a deeper understanding of issues related to faculty satisfaction
Summary and Update

- We have created a culture of engagement that will ensure solutions that acknowledge the concerns of all members of the faculty.

- A formal mentor training program was adopted and mandatory participation for junior faculty (hired with 5 years) has begun. A Director of Mentoring has been appointed, this is a newly created position to demonstrate commitment to mentoring and additional efforts that promote career satisfaction and we hope “wellness” and enjoyment at work.
Oral presentations

Sunday, September 18, 2016
1:30pm – 2:30pm

Note: All presentations may not be included as we are still collecting the final presentations from presenters, some may have been omitted for copyright purposes. Check back periodically for updates.
INCREASING JOY IN MEDICINE

ICPH 2016 | INTERNATIONAL CONFERENCE ON PHYSICIAN HEALTH™
Fredrik Bååthe

Nothing to disclose
Striving for professional fulfillment - exploring physicians’ experience of engagement

This presentation is based upon my PhD Thesis, defended 11 Dec 2015: Physicians’ engagement: qualitative studies exploring physicians’ experiences of engaging in improving clinical services and processes.

Fredrik Bååthe, PhD Medical science, Sahlgrenska Academy at Gothenburg University Sahlgrenska University Hospital, Institut of Stressmedicine, Region Västra Götaland (VGR), Sweden.
Background

- Physicians’ are engaged in the bio-medical and technical development of health care. **But** it is well documented that physicians’ engagement in developing clinical services and processes often is limited or missing.  
  – (Berwick and Nolan -98; Davies et al -07; Tingle 2011; Lee and Cosgrove 2014)

- Very few empirical studies have explored experiences from physicians about engaging in development work  
  – (Snell et al. 2011; Kaissi 2014)

- Scientific knowledge gap about physicians’ own experiences about **why**, engaging or not, in improving clinical services and processes.
Aim of the research project

To explore physicians’ experiences of engagement in improving clinical services and processes, in order to gain more understanding about why such initiatives have problems engaging physicians.

- Two specific aims and four published papers:
  1. To explore how physicians’ experienced their own engagement
  2. To explore physician experiences after changing to a patient-centered and team-based ward round
Physicians’ engagement, does that really matter?

• Good solutions to healthcare challenges need interaction between the complete care team to be clinically robust and truly functional

• Being medically responsible physicians have a unique position to support or hinder initiatives

Simply stated, leaders are not likely to achieve system-level improvement without the enthusiasm, knowledge, cultural clout and personal leadership of physicians.”

• (Reinertsen et al. 2008, p. 23)
What is ”clinical services and processes”?

• Developing the hospital ward round is an example of a clinical process where physicians’ engagement is really important

• The Dartmouth Institute might use the term “clinical microsystem”

“We need to stop regarding ward rounds as ‘ordinary and unremarkable’ but in need of our focused attention just as much as the most expensive technology or complex drug treatment. The benefits to quality, safety, effectiveness, efficiency and staff satisfaction would be enormous, and patients would be hugely happier as well.”

• (Caldwell 2013)
Overarching methodological consideration

• Physician engagement is a complex and challenging phenomenon (Davies et al. 2007)

• Researchers need to consider non-linear models, studying complex human phenomena, like physicians’ engagement (Stacey 2011; Dickson 2012).

• Forming a research based framework about enhancing physician engagement, Graham Dickson (2012) suggested the theory of complex responsive processes “an appropriate lens to apply to the improvement of physician engagement.” (p. 7),
Methods

- Studying complex human phenomena, researchers need to consider non-linear models, (Stacey 2011; Dickson 2012)
- Qualitative and explorative studies
- Semi-structured physician interviews (25 + 13 physicians)
- Particular analytical approaches used:
  - Paying close attention to individual physician’s experiences, while at the same time analytically striving towards finding an empirically grounded conceptualization of physicians’ experiences
    - Grounded Theory - Glaser and Strauss 1967; Charmaz 2006
    - Qualitative analysis - Miles and Huberman 1994
    - Abductive analysis – Coffey and Atkinson 1996; Alvesson and Sköldberg 2008
    - Complex responsive processes – Stacey 2011, Stacey and Mowles 2015
Interactive research process
engage clinicians to find areas relevant for both science and practice

Ellström et al. 1999
Different views about management and change

Linear causality
Mechanistic perspective
(simple and complicated)

Non-linear causality
Organic perspective
(complex)
How physicians experienced their engagement in healthcare development

- Striving for professional fulfillment was found to be a central motivator impacting physicians’ engagement, for both clinical and development work
  - Empirically grounded model built on two core dimensions: being useful and developing
- Physician’s engagement was reinforced if the task at hand was contributing to the experience of being useful and developing
- Organizational conditions reinforcing engagement:
  - recognition
  - continuity
  - task clarity and role clarity

Conceptual model of physicians’ engagement

How physicians experienced their engagement in healthcare development...part 2

• Which tasks contributed to *professional fulfillment* was related to how medical practice was *individually* understood—fulfilling the role “being a good doctor”

• Two alternative understandings emerged:
  – The *traditional doctor role*: high autonomy in relation to organization and management, patient work as the source for professional fulfillment
  – The *employeeship role*: in addition to patient work, participation in development work also contributed towards professional fulfillment

Ward rounding

• Naturally, as medical practice has changed over the years, the 21st Century ward round will need modification
  • The Lancet, editorial, Oct 2012

• Ward rounding is a central and well establish praxis in hospital care, however methods for running ward rounds effectively and ethically has been given very little attention
  • Launer, 2003

• Research how professionals view changes to ward rounds is important, but very sparse
  • Fiddler et al., 2010
Rational behind changing the ward round

• Many unsatisfied with traditional 4-bed-room rounding
• Physicians outlined a new structure, fall 2008
  • increase patient integrity
  • minimize info-handovers between health professionals.
  • finalize tasks related to each patient
• Co-evolution with other professional groups, and Ok! by Head of Dept.
• Pilot-testing during summer 2009
• Launch of new ward round concept, fall 2010

…change of rounding was (and still is 2016) an evolutionary ongoing process.

Short film showing the new ward round in praxis http://www.youtube.com/watch?v=o4uD4stBtZo,
or Google ”andra ronden Kungalv” http://wardround.net/concept/
Physician experiences changing to a patient-centered and team-based ward round

- Fruitful physician experiences from the new ward round:
  - Patients’ meeting the care team in a separate room with the patient sitting in a chair, reduced hierarchical distance and improved the patient-caregiver relation
  - this “space” enabled richer patient communication, contributing to more informed decisions
  - fewer follow-up questions from patients
  - increased professional fulfillment (professional pride and “return of joy in medicine”)

- Painful/challenging experiences for physicians from the new ward round:
  - reduced autonomy – actually following the agreed and defined round structure
  - lack of functional communication strategies, to manage time constraint in a closed room
  - exposing potential knowledge gaps in front of others.

Physician experiences after changing to a patient-centered and team-based ward round

• According to physicians’ focal points during ward rounding, different ways to understand medical practice were found;
  – the *We*-perspective adhering to a more comprehensive and patient-centered practice
  – the *I*-perspective adhering to a more bio-medical and doctor-centered medical practice

The new ways of working was experienced differently

  – When the new round principles were in line with individual physician’s professional identity, the new ward round was appreciated (*We*-perspective).
  – When the new round principles challenged individual physician’s identity, the new ward round was not appreciated (*I*-perspective)
Conclusions

• Physicians are, in an abstract general sense, engaged in improving clinical services and processes
  – the relatively quick contribution to *professional fulfillment* from patient work, compete with the more long-term, complex, difficult to measure improvement work
  – the empirical model present organizing principles to facilitate physician engagement
  – the PhD thesis in one sentence…“looking for engagement – finding identity”

• Which tasks contributed to *professional fulfillment* was related to individual physician’s understanding of medical practice (professional identity)

• The *We-perspective (the employeeship role)*…
  – a more comprehensive and patient-centered understanding of medical practice,

• …co-exist with the *I-perspective (the traditional doctor role)*
  – a less comprehensive bio-medically oriented and doctor-centered medical practice.

• Aiming towards 21th century healthcare this need to be recognized
  – A more comprehensive bio-psycho-social medical curricula suggested by “World Federation of Medical Education” (Gordon and Karle 2012; Gordon 2014)
  – Scaffolding structures to facilitate also senior physicists’ professional identity to evolve

• Change processes impacting the inner core of medical praxis need to address
  – *both what* new knowledge or activities (epistemological),
  – *and who* “I am becoming”, working in this new way (ontological)
Implications and practical concerns forward

• Societal expressed need and demands for patient-centered 21st century healthcare calls forward physician capabilities not fully within the traditional bio-medical model
  – Primarily physicians with a more doctor-centered *I*-perspective are challenged

• This needs to be acknowledged by politicians and managers (and talked about and worked with amongst physicians)

• Evolving physicians’ professional identity – “Just do it”?  
  – A more comprehensive bio-psycho-social medical curricula suggested by “World Federation of Medical Education” (Gordon and Karle 2012; Gordon 2014)  
  – Junior physicians identity highly influenced by encounters with senior physicians  
  – Suggested that faculty/senior physicians need support to evolve their professional identity towards a more comprehensive understanding of medical practice  
    ▪ scaffolding structures to enable experiential learning in “safe” settings  
    ▪ time scheduled for collegial reflection about individual experiences (including doubts, anxiety…and increased joy from medical practice)

• Without support to individuals experiencing a challenge to professional identity, resistance towards the 21st century healthcare is likely to follow!
This presentation based upon my PhD Thesis, defended 11 Dec 2015:

Physicians’ engagement: qualitative studies exploring physicians’ experiences of engaging in improving clinical services and processes.

Available digitally at: http://hdl.handle.net/2077/40438

Appreciations to:

**Main supervisor:** Professor Kerstin Nilsson

**Assistent supervisors:** Professor Lars Edgren, Assistent professor Gunnar Ahlborg, PhD Annica Lagström

**External mentor:** Professor emeritus Lars-Erik Norbäck

**Financing** from Swedish innovation agency Vinnova (project Tvärkraft) and Region Västra Götaland (VGR)
Thank you!

Questions and comments very welcome

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phone: +46 736-60 17 10
EXTRA MATERIAL...
Ward rounding

• Naturally, as medical practice has changed over the years, the 21st Century ward round will need modification
  • The Lancet, editorial, Oct 2012

• Ward rounding is a central and well establish praxis in hospital care, however methods for running ward rounds effectively and ethically has been given very little attention
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Mechanistic perspective
(simple and complicated)

Non-linear causality
Organic perspective
(complex)

Now
New position
Reflections about methodological choices
Reflexivity, relevance, validity: foundational criteria's for scientific knowledge (Malterud 2001; 2014)

- **Reflexivity**: being aware of own voice and perspective…not *overpowering* the interviewees
  - All pre-understandings contribute with advantages and disadvantages
    » choice to engage with hospital where I had no management relation to facilitate for myself to embrace the role as researcher and not ex-manager
    » management experience from the nearby university hospital enabled a good understanding of national and regional requirements and initiatives
  - Multifaceted and balanced interpretation of the empirical data by engaging a trans-disciplinary team of researchers with complementary experiences to my own (Research group triangulation Pattton 2002)
    » experienced physician and associated professor in medicine
    » experienced nurse and professor in healthcare leadership and pedagogics
    » manager and senior lecturer in healthcare pedagogics
    » professor in business administration with experience in healthcare research
...methodological choices, continued.

Reflexivity, relevance, validity: foundational criteria's for scientific knowledge (Malterud 2001; 2014)

- **Relevance**: is this a piece of research that is needed and matters
  - Interacting with local practitioners drives relevance (Greenhalgh et al. 2004)
  - Building on previously identified gaps in scientific knowledge
  - Focusing aspect that is considered societal grappling and clinical frustration

- **Validity**
  - Internal=do the methodological choices provide a valid understanding of the phenomena explored
    - explorative qualitative studies since limited knowledge and complex phenomenon
    - interviews to understand the world as experienced by the physicians
    - face-to face individual interview to be able to probe deep and ask for examples
    - well-established qualitative analytical methods used
    - preliminary findings presented to and appreciated by the local practitioners
    - using complex responsive processes, a theory that caters to complex phenomena
    - interpretation of empirical material by a trans-disciplinary team of researchers
  - External=transferability, are findings valid outside the specific context
    - Previous research in other context, with parallel findings, suggests transferability
    - Awareness of contextual perspectives, no claim of “definitive truth” but “temporal clarity”
    - Complex responsive processes argue “meaning” created in local interaction (Stacey 2011)
    - Degree of commonality amongst physicians…community of praxis (Wenger 2000)
    - Usage of research a dynamic act, completed if, and only if someone can make better sense of a situation or a process with the help from research texts (Larsson 2009)
Brief overview...more depth in the thesis/papers


Ongoing recalibration of the medical curricula towards an integrative approach

• Combining bio-medical knowledge with social and psychological aspect of care and disease
  – Lancet global commission of postsecondary education in health towards the 21th century healthcare (Frenk et al 2010)
  – World federation for Medical Education (Gordon and Karle 2012; Gordon 2014)

• From a bio-medical focus towards a more comprehensive bio-psycho-social medical curricula.
  – towards a broader inclusiveness in the understanding of medical practise going forward.

• From the more transactional understanding focusing what the physician consider the patient need to be informed about, towards a more inter-relational understanding where the physician also consider how to support patients to integrate new situations into a quality of life (Dall’Allba 2004)
Professional identity and medical education

• There has been an unbalance in favor of bio-medical knowledge, facts and skills which now is being reconsidered by medical educators (Wald et al 2015)

• Recently educators have started to consider the teaching of professionalism as a means to an end, with the actual end seen as individuals developing a professional identity as physician (Creuss et al 2015)

• The professional identity of physicians is critical to the practice of medicine, in the service to societal and individual patients’ needs, as well as for the well beings of physicians themselves (Holden et al 2015)
Professionalism vs. Professional identity

• Professionalism another construct than professional identity

• Definitions according to Wilson et al (2013)
  – Professional identity is how an individual conceives of him or herself as a doctor
  – Professionalism involves being and displaying the behavior of a professional
Focus forward

• Striving towards more comprehensive understanding of medical practice is a way to respond to the societal demands for more patient-centered healthcare
  – in line with the new legal requirements in Sweden
  – for the benefit of patients…but equally important
  – potential for increased professional fulfillment for physicians themselves

• Increased care for the patients also requires increased care for the providers (Bodenheimer and Sinsky 2014)
The risk with the hidden curricula…and the cure

• The culture of medicine in hospitals does not support young physicians in their strivings towards becoming good doctors. It is thus hard for them to reconcile the official education curricula with the clinical, hidden, curricula (Coulehan 2005)

• In order to facilitate junior physicians updated curricula to become manifest in their professional identity, there seem to be a parallel need to also consider how to evolve senior physician professional identity towards the same converging goal, i.e. 21th century healthcare.
Elizabeth Brooks
Scott Humphreys

Nothing to disclose
Designing Client Exit Surveys to Capture Program Effectiveness Data

Presented to the:
International Conference of Physician Health, Sept 2016

Elizabeth Brooks, PhD
Scott Humphreys, MD
Why measure PHP participant outcomes?

- Garner support for new or innovative initiatives
- Address concerns/questions to medical boards, boards of directors, other stakeholders
- Retain/increase funding opportunities
- Identify strengths/weaknesses in program
- Develop and justify budgets
- Prepare long-range goals
- Target effective services for expansion
- Improve client engagement
- Monitor clients’ perception of the PHP
Look Familiar?
Physician Health Programs: More Harm Than Good?
State-Based Programs Under Fire
Pauline Anderson
August 18, 2015

There is growing scrutiny of US physician health programs (PHPs), which are state-based plans for doctors with substance abuse or other mental health problems.

Detractors of the PHP system claim physicians who voluntarily disclose they have mental health or drug problems can be forced into treatment without recourse, face expensive contracts, and are frequently sent out of their home state to receive the prescribed therapy. Some physicians allege that during their interaction with the treatment centers, large amounts of money were demanded up front before any assessment was even conducted.

In addition, critics assert that there is no real oversight and regulation of these programs.

Related Drugs & Diseases
Seminoma Pathology

Many physicians are referred to state physician health programs (PHPs) for evaluation, monitoring, and treatment of mental health and substance use disorders. Most PHPs are “diversion” or “safe haven” programs, meaning that physicians who suffer from alcohol or drug problems can have their case diverted to the PHP in lieu of being reported to the state licensing board. If the physician agrees to cooperate with the PHP and adhere to any recommendations it might make, the physician can avoid disciplinary action and remain in practice. These programs are therefore quite powerful and yet, to our knowledge, there has not been any systematic scrutiny of the ethical and management issues that arise in standard PHP practice. Given our 20 years of service as associate directors of one state PHP we analyze and evaluate the standard operating procedure of many PHPs and offer ethical critique as well as suggestions for improvement.

Key Words: physician health, physician health program, impaired physician, medical ethics, conflict of interest

Ethical and Managerial Considerations Regarding State Physician Health Programs

J. Wesley Boyd, MD, PhD and John R. Knight, MD

Many physicians are referred to state physician health programs (PHPs) for evaluation, monitoring, and treatment of mental health and substance use disorders. Most PHPs are “diversion” or “safe haven” programs, meaning that physicians who suffer from alcohol or drug problems can have their case diverted to the PHP in lieu of being reported to the state licensing board. If the physician agrees to cooperate with the PHP and adhere to any recommendations it might make, the physician can avoid disciplinary action and remain in practice. These programs are therefore quite powerful and yet, to our knowledge, there has not been any systematic scrutiny of the ethical and management issues that arise in standard PHP practice. Given our 20 years of service as associate directors of one state PHP we analyze and evaluate the standard operating procedure of many PHPs and offer ethical critique as well as suggestions for improvement.

Key Words: physician health, physician health program, impaired physician, medical ethics, conflict of interest

description of standard PHP practices is available elsewhere (DuPont et al., 2009). Physician health programs then report the results of compliance including drug test results to licensing boards, credentialing agencies, employers, and others who need to know that the physician is sober, compliant with treatment, and capable of practicing medicine safely.

Physician health programs have evolved over the last several decades from often-humble origins in which physicians, some with substance use histories themselves, volunteered their time to reach out to other physicians who were in need. From these roots, PHPs have evolved into incorporated agencies that have formalized agreements with their state licensing boards specifying the exact content of their monitoring agreements and how noncompliance is handled. A handful of PHPs are subsidiaries of state medical societies, whereas the majority are independent entities. They are funded through a variety of means, including grants from state licensing boards, fees charged to participants, contributions from their state medical...
Public scrutiny of PHPs forewarns us to think proactively in order to respond to claims of ineffectiveness (or worse)
Status of Physician Health Research

PubMed: 301 “physician health”
>> 38? “physician health program”

• Quite a bit on physician/resident stress and burnout, substance use, prescribing practices

• Some: physician/resident patient communication, suicide, personal care practices/care-seeking

• Mainly descriptive
• Very little showing the impact of PHPs on clients/patients

Bottom line = lots of room to grow….nature abhors a vacuum and the lack of data is often filled by misinformation
Process of a Study: Exit Survey
Project Highlight: Exit Survey

- Examines the impact of CPHP on various client outcomes

- Stemmed from CPHP Client Satisfaction Survey
  - Many indicated that they “improved” after their involvement with CPHP but how this improvement occurred was not captured.
Determine Purpose

• Primary Objective: To understand the impact of CPHP participation on clients’ personal, interpersonal, and professional behaviors.

• Primary Use: Gather data that can be used in aggregate administrative and research reports.
Determine Process

- Administration mode
- Administration procedure (timing, contact request)
- Survey length
- Long term data storage
Determine Survey Domains

- Background characteristics
- Participation outcomes
- Client satisfaction
- 3 “bonus questions” for further exploration
Determine Survey Domain Categories

- Background
  - Gender
  - Age
  - Problem

- Outcomes
  - Professional
  - Personal
  - Interpersonal

- Satisfaction
  - Overall
  - By service/clinician
Determine Specific Questions

- Question formation
- Accept/eliminate
- Re-wording
- Testing
- Revising
<table>
<thead>
<tr>
<th>PROFESSIONAL IMPACT</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more satisfied with work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel less stressed or burned out at work</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am better able to understand or empathize with my patients</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The medical care I provide to my patients has improved</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have a better understanding about prescribing practices</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My professional relationships improved</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My work feels more meaningful</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>PERSONAL IMPACT</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>I feel better able to cope with <strong>life changes</strong></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel better equipped to manage my <strong>own health care</strong></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My <strong>self-esteem</strong> improved</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My <strong>mood</strong> improved</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have a better <strong>work-life balance</strong></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel better equipped to deal with the <strong>financial and/or retirement transitions</strong> I’m facing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My <strong>personal care practices</strong> improved (e.g., diet, exercise)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I attend <strong>church/worship or participate in spiritual activities</strong> more</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>INTERPERSONAL IMPACT</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>My personal life is less stressful</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My spouse/partner and I communicate better</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am more satisfied with my personal relationships</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am better equipped to manage problems at home</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I spend more time with family or friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>CPHP adequately informed me about what information can and would be shared with the Medical Board</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>CPHP handled my case in a confidential manner</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>CPHP treatment recommendations were appropriate to my needs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I continue to use at least some of the treatment recommendations provided by CPHP</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I received adequate information about how to reinstate my practice privileges on existing licensing restrictions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q: Prior to participating with CPHP, did you believe that your problem(s) negatively affected your competency at work?
☐ Yes    ☐ No    ☐ N/A

Q: After participating with CPHP, do you believe that your problem(s) negatively affected your competency at work?
☐ Yes    ☐ No    ☐ N/A
Q) Prior to participating with CPHP, did you believe that you ever put patients at risk b/c of your problem(s)?
☐ Yes  ☐ No  ☐ N/A

Q) After participating with CPHP, do you believe that you ever put patients at risk b/c of your problem(s)?
☐ Yes  ☐ No  ☐ N/A
CURRENT STATUS

• LIVE: DEC 2015
• Surveys Completed ≈ 47

Dissemination Plan

• Presentations at meetings
• Share with other PHPs
• Systematic reports for future manuscripts
Thanks and Questions

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Physician Wellness and Happiness in the Workplace

Jodie Eckleberry-Hunt, Ph.D., A.B.P.P.
Heather Kirkpatrick, Ph.D., A.B.P.P., M.S.C.P.
Kanako Taku, Ph.D.
Ronald Hunt, M.D., F.A.A.F.P.
Rashmi Vasappa, D.O.
Physician Happiness and Wellness in the Workplace
(Eckleberry-Hunt, Kirkpatrick, Taku, Hunt, Vasappa)

The authors have nothing to disclose.
Physician Happiness and Wellness in the Workplace (Eckleberry-Hunt, Kirkpatrick, Taku, Hunt, Vasappa)

This study was funded through the Joint Grant Awards Program at the American Academy of Family Physicians
Learning Objectives

• At the conclusion of the presentation, participants will be able to:
  – Define elements of physician wellness
  – Describe work-related factors that contribute to physician happiness
  – Describe work-related factors that contribute to physician wellness and burnout
Study 1: Questions and Hypothesis

Research Questions:
What factors define wellness specific to physicians?

How do burnout and wellness contribute to physician happiness?

Hypothesis:
Measures of wellness will explain a significant amount of variance in physician happiness beyond the contribution of burnout alone.
Methodology

- 2,000 members of the American Academy of Family Physicians
- 22% response rate
- Focused on 310 Full-time Physicians
- Administered:
  - Physician Wellness Inventory (Version 1)
  - Maslach Burnout Inventory
  - Subjective Happiness Scale
Methodology

- Demographic data
- Number of hours worked per week.
- “How would you rate your ability to manage your current workload?” on a scale of 1 to 10 (1=poor and 10=excellent)
Maslach Burnout Inventory

• 22 items measuring characteristics of burnout (Gold Standard)
• 7 point Likert-type scale ranging from Never to Everyday
  • Emotional Exhaustion (High score=Higher distress)
  • Depersonalization (High score= Higher cynicism)
  • Personal Accomplishment (Low score = Feeling of less accomplishment)

Subjective Happiness Scale

• 4 item global assessment of happiness
• 7 point Likert type scale ranging from “Not a very happy person” to a “Very happy person”
• Higher score = more happy

Physician Wellness Inventory (PWI)

- Exploratory instrument based on physician interviews and pilot testing
- Wellness factors specific to physicians
- 5 point Likert-type scale ranging from Strongly Disagree to Strongly Agree

Data Analyses

Exploratory Factor Analysis on PWI

PWI

Factor #1
Factor #2
Factor #3
Data Analyses

• Hierarchical regression analysis with **physician happiness** as the outcome variable

1. Gender and age
2. Docs ratings of:
   - manageability of workload
   - # of hours/week
3. MBI subscales (3)
4. PWI subscales (3)
Results

Factors

• Three factors found:
  – Career Purpose
  – Distress
  – Cognitive Flexibility

*Diet, exercise, substance use, social support not significant factors

• Account for 55.41% of the variance in physician wellness

• Results were supported by a Bartlett test ($p < 0.001$) and a Kaiser-Meyer-Olkin measure of sampling adequacy test (0.878)
## Demographics of the Study Sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No. (% of respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(the numbers do not equal 100% due to rounding)</td>
</tr>
</tbody>
</table>

### Gender
- Male: 170 (55%)
- Female: 140 (45%)

### Ethnicity
- Caucasian: 249 (80%)
- African American: 11 (4%)
- Hispanic: 8 (3%)
- Native American: 1 (0.3%)
- Arabic or Middle Eastern: 5 (2%)
- Asian or Pacific Islander: 21 (7%)
- Other: 12 (4%)
- Missing: 3 (1%)
## Factor One: Career Purpose

<table>
<thead>
<tr>
<th>Statement</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with patients brings me satisfaction.</td>
<td>.855</td>
</tr>
<tr>
<td>My work brings joy to my life.</td>
<td>.749</td>
</tr>
<tr>
<td>Positive patient relationships outweigh negative patient relationships.</td>
<td>.651</td>
</tr>
<tr>
<td>I am generally satisfied with my career choice.</td>
<td>.619</td>
</tr>
<tr>
<td>I feel a spiritual purpose or connection with my life’s work.</td>
<td>.546</td>
</tr>
</tbody>
</table>

Cronbach’s alpha .83
# Factor Two: Distress

<table>
<thead>
<tr>
<th>Factor 2: Distress</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past two weeks, my inability to control my distress has negatively affected the care I give patients.</td>
<td>.780</td>
</tr>
<tr>
<td>Over the last month, I have often been bothered by feeling nervous, anxious or on edge.</td>
<td>.728</td>
</tr>
<tr>
<td>During the last two weeks, I have often been bothered by little interest or pleasure in doing things.</td>
<td>.644</td>
</tr>
<tr>
<td>During the past two weeks, I have often been distressed by administrative demands that compete with clinical duties.</td>
<td>.534</td>
</tr>
<tr>
<td>Over the past month, there has been a patient encounter that has distressed me.</td>
<td>.448</td>
</tr>
</tbody>
</table>

Cronbach’s alpha .756
**Factor Three: Cognitive Flexibility**

| I am open to new ideas and ways of doing things in the workplace. | .654 |
| Feeling compassion for others is a regular part of how I work. | .593 |
| I often see more than one side to an issue. | .569 |
| I spend time reflecting on things I can improve about myself, my life, and my professional role. | .466 |

Cronbach’s alpha .657
Results

- A hierarchical regression was calculated to predict *happiness* based on demographics and the PWI and MBI subscales. A significant regression equation was found ($F(10, 385) = 20.899, p < .001$), with an $R^2$ of .35. Participants’ predicted happiness is equal to $8.266 + .30$ (PWI Career Purpose) + .15 (MBI Personal Accomplishment) - .13 (PWI Distress) + .12 (perceived workload).
Results of the Hierarchical Regression Analysis: Happiness

Of 10 predictors career purpose, personal accomplishment, distress, and ratings of workload manageability significantly predicted happiness.

<table>
<thead>
<tr>
<th>Set of Predictors</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.03</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.01</td>
</tr>
<tr>
<td>Workload</td>
<td>0.12*</td>
</tr>
<tr>
<td>Hours worked</td>
<td>0.04</td>
</tr>
<tr>
<td>MBI: Emotional Exhaustion</td>
<td>-0.12</td>
</tr>
<tr>
<td>MBI: Depersonalization</td>
<td>0.10</td>
</tr>
<tr>
<td>MBI: Personal Accomplishment</td>
<td>0.15**</td>
</tr>
<tr>
<td>PWI: Career Purpose</td>
<td>0.30***</td>
</tr>
<tr>
<td>PWI: Distress</td>
<td>-0.13*</td>
</tr>
<tr>
<td>PWI: Cognitive Flexibility</td>
<td>0.06</td>
</tr>
</tbody>
</table>

* $p < .05$, ** $p < .01$, *** $p < .001$
Discussion

• Two of the three PWI factors, one of the MBI factors, and workload manageability were related to physician happiness:
  – Career Purpose (PWI) +
  – Personal Accomplishment (MBI) +
  – Distress (PWI) -
  – Workload Manageability (single item question) +

**The number of hours worked did not relate to happiness**
Discussion

• Wellness includes (not exclusively) Career Purpose, Low Distress, Cognitive Flexibility

• Feelings that one’s life has meaning and accomplishment at work relate to overall happiness

• Distress (particularly work-related) and the feeling that work is manageable are related to overall happiness
**Study 2: Question and Hypothesis**

**Research Question:**
What is the relationship of certain work and health variables and perceived social support with physician wellness, burnout, and self-reported patient care?

**Hypothesis:**
The # of years in practice, # of hours worked per week, health status, mental health status, ability to manage workload, and perceived social support will predict physician wellness, burnout and self-reported patient care quality.
Methodology

- Data were collected as part of the previously described study that included the PWI and MBI but added the Patient Care Scale (PCS)
  - 8 item instrument (based on Firth-Cozens and Greenhalgh categories of stress in patient care) with 0-6 response scale (0=never and 6=everyday) based on previous qualitative study.
  - Participants asked to choose the response that best described them over the last 4 months. Higher scores indicate that stress has lowered perceptions of care quality.
    - Cronbach’s Alpha=.87

Patient Care Scale

• Within the last four months:
  – I have been irritable with patients
  – I have been impatient with patients
  – I have taken shortcuts that could negatively impact patient care
  – I did not follow standard procedures that could have negatively affected the patient care I provided
  – I made treatment errors not secondary to medical knowledge
  – I did not listen to a patient’s complaints
  – I feel guilty about how I treated a patient
  – I seriously think about leaving the practice of medicine
Methodology

• Work and Health Questions
  – Practice setting, years in practice, number of hours worked per week
  – How would you rate your ability to manage your current workload?
  – How would you rate the quality of your family support?
  – How would you rate the quality of support from friends and important others?
  – How would you rate your physical health status?
  – How would you rate your mental health status?
*Responses on a 1-10 scale, 1 being poor and 10 being excellent
Data Analysis: Regression Analyses

• Predictor Variables
  – number of years in practice
  – number of hours worked per week
  – self-rated health status
  – self-rated mental health status
  – ability to manage workload
  – perceived social support (family and friends)
Data Analysis: Regression Analyses

- Outcome Variables
  - Physician Wellness Inventory Subscales
    - Career Purpose, Distress, Cognitive Flexibility
  - Maslach Burnout Inventory Subscales
    - Emotional Exhaustion, Depersonalization, Personal Accomplishment
  - Patient Care Scale Total Score
Results--PWI

• Self-rated mental health was the strongest predictor
  • Career Purpose (β = .39***), Distress (β = -.43***), Cognitive Flexibility (β = .15*), Patient Care Quality (β = -.33***), Emotional Exhaustion (β = -.42***), Depersonalization (β = -.31***), Personal Accomplishment (β = .24***)

• Ability to manage workload was the 2nd strongest predictor
  • Career Purpose (β = .15**), Distress (β = -.30***), Emotional Exhaustion (β = -.36***), Patient Care Quality (β = -.24***)

* p < .05, ** p < .01, *** p < .001
Summary of results predicting PWI

Subjective ratings of mental health explains all three aspects of physician wellness (providing good validity for PWI)
Summary of results predicting MBI

Subjective ratings of mental health explain all three aspects of physician burnout.
Summary of results predicting Patient Care

Subjective ratings of mental health and ability to manage workload (but not actual hours worked) significantly predict self-perceived patient care.

\[ \beta = -0.33 \]

\[ \beta = -0.24 \]

\[ R^2 = 0.20 \]
Discussion

• Physicians with better self-reported mental health have stronger career meaning, lower distress, more flexible thinking, higher self-reported quality of patient care, less cynicism about patients, and higher feelings of pride in work.
• The ability to manage workload is related to stronger career meaning, less distress, and better self-reported patient care quality.
• Health status and social support were not related to wellness, burnout or patient care quality.
• It doesn’t seem to be the number of hours worked per week but how manageable the work is.
Conclusions

• Wellness is more than the absence of burnout.
• If Career Purpose is related to happiness, how do we foster it?
• It is less the hours worked per week but perceptions of workload manageability that seem to matter. What makes work feel unmanageable?
• How do we decrease physician distress and improve self-ratings of mental health?
Conclusions: Implications for practice

• We need to understand more about what promotes career meaning among physicians.

• We need to help physicians relieve distress. (i.e., evidence based practices of mindfulness, reflection groups, cognitive behavioral interventions). We should provide workplace based interventions to remove barriers.

• We must move beyond the seeing the problem as within the physician and move to addressing problems within the workplace that make work feel unmanageable.
Next Steps

- Further investigation of Physician Wellness Inventory with other populations
- Examine other factors as a part of physician wellness
- Randomized controlled trials of interventions to see if wellness and happiness can be improved
Contact Information

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- Heather Kirkpatrick (hkirkpat@genesis.org)
- Ronald Hunt (ronald.hunt@Beaumont.org)
References

References

References


References

29. Lemaire JB, Wallace JE. Not all coping strategies are created equal: a mixed methods study exploring physicians’ self reported coping strategies. BMC Health Serv Res 2010;10:208.
MAGALI FASSIOTTO, PhD

Nothing to disclose
Academic Biomedical Career Customization

Stanford University School of Medicine

Magali Fassiotto, PhD
Office of Faculty Development and Diversity
Assistant Dean
Director, Programs and Research
Work-Life Flexibility and Physician Burnout

Satisfaction with Work-Life

- 2011: 48.5%
- 2014: 40.9%

Burnout

- 2011: 45.5%
- 2014: 54.4%

A Physician Talent Imperative

“A game-changing factor … stems from the different work expectations of next-generation physicians and researchers. [...] Today’s recruit’s are quite insistent about balancing work schedules with the rest of their lives.” – AAMC 2012

Most important considerations in choosing an employer

*Merritt Hawkins survey of last year residents, 2014*

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic Location</td>
<td>#1 - Geographical Location</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>#2 – Financial Package</td>
</tr>
<tr>
<td>Adequate Personal Time</td>
<td>…</td>
</tr>
<tr>
<td>Financial Package</td>
<td>#6 – Adequate Personal Time</td>
</tr>
</tbody>
</table>
Findings From a Day in the Life

- Programs are available but using them violates core beliefs about what it takes to succeed

Redesign current programs and create new programs that recognize the necessary culture shift
ABCC Banking System: Framework

Addressing *Work-Life Conflict*…

…*And Work-Work Conflict*

- research
- writing/editing
- graphics
- lab management
- speech coach
- career advancement

- clinical
- teaching
- mentoring
- service/admin

- credits

- family
- friends
- hobbies
- health
- sleep

- housecleaning
- meals
- errands

- time

- work

- work support

- home support
## Credit-Earning Activities

<table>
<thead>
<tr>
<th>Emergency Medicine</th>
<th>Pediatric Hematology</th>
<th>Blood and Marrow Transplantation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Covering a shift on short notice (72 hours or less) in order to allow someone to deal with a personal or family need</td>
<td>• Clinical coverage with less than 2-week notice</td>
<td>• Clinical coverage with less than 2-week notice</td>
</tr>
<tr>
<td>• Covering a shift on any notice to allow a colleague to participate in disaster relief (i.e., Stanford’s <em>Emergency Response</em> program)</td>
<td>• Clinical outreach</td>
<td>• Interviewing residents</td>
</tr>
<tr>
<td>• Mentoring junior faculty, fellows, residents, or students</td>
<td>• Covering for someone’s clinical call for their flexibility needs</td>
<td>• Hospital and University committee work</td>
</tr>
<tr>
<td></td>
<td>• Hospital and University committee work</td>
<td>• Organizing a special project which benefits BMT as a whole but is not part of faculty’s duties (e.g., medical education-related projects, organizing symposia, etc.)</td>
</tr>
</tbody>
</table>
Customized Support

Home Services
- Meal Delivery
- Lunch Certificates
- Housecleaning
- Task Outsourcing
- Amazon Prime
- Driving Services
- Laundry Services

Work Services
- PPT Design
- Paper Editing
- Grant Writing Support
- Website development
- Life Coaching
- Speech Coaching
Monthly Credits Banked and Services Redeemed

Clinical Faculty: Credits Banked

- Mentoring: Internal + External
  - Male: 30%
  - Female: 40%

- Stanford Service, Service to Discipline, Clinical Outreach
  - Male: 39%
  - Female: 31%

- Teaching
  - Male: 4%
  - Female: 4%

- Last Minute Clinical Shifts
  - Male: 33%
  - Female: 29%

Total Average Credits:
- Men: 4.0/month
- Women: 4.2/month

Clinical Faculty: Services Redeemed

- Home Support
  - Male: 84%
  - Female: 83%

- Work Support
  - Male: 16%
  - Female: 17%

"Instead of spending countless hours cleaning and cooking, I can actually accomplish work for Stanford in a timely manner. I can rest at night in a clean home and have eaten a decent meal."
ABCC Survey Results

<table>
<thead>
<tr>
<th></th>
<th>Pre-ABCC</th>
<th>Post-ABCC</th>
<th>* p&lt;.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellness behavior avoidance</td>
<td>4.11</td>
<td>3.87</td>
<td></td>
</tr>
<tr>
<td>Support for a culture of flexibility</td>
<td>2.99</td>
<td>3.23</td>
<td>*</td>
</tr>
<tr>
<td>Institutional satisfaction</td>
<td>3.05</td>
<td>3.30</td>
<td>*</td>
</tr>
<tr>
<td>Support from colleagues</td>
<td>3.67</td>
<td>3.61</td>
<td></td>
</tr>
<tr>
<td>Perceptions of control over time and resources</td>
<td>2.64</td>
<td>2.77</td>
<td></td>
</tr>
</tbody>
</table>

N=60
75% (N=45) Clinical Faculty
Specific Wellness and Engagement Items

• Frequency of physicians volunteering to step up to fill a clinical service on short notice to help a colleague has gone from 44% to 83%

• 18% increase in agreement: Service and Leadership Activities are Valued by the School of Medicine

• 20% increase in agreement: I intend to stay employed at the Stanford School of Medicine for the foreseeable future

• 20% increase in agreement: Stanford’s current work-life benefits are satisfactory for my needs

• 22% increase in agreement: Patient care is valued by the School of Medicine

• 39% decrease in agreement: In the past 12 months, I have frequently postponed or avoided taking vacation due to lack of time
Conclusions

- How do we provide cultural change in the physician workplace to support career flexibility and physician wellness?

- The ABCC time banking system led to reported increases in job satisfaction and satisfaction with work-life flexibility as well as decreases in wellness avoidance behaviors.

- Banking credits can reduce the guilt associated with asking others for help, increasing flexibility across teams.

- Making flexibility central to team processes allows for recognition around the type and amount of “extracurricular” service work performed.

- Challenges: Shifting revenue into non-revenue generating activities.
Reading Patients, Reading Poetry

Dean Gianakos, MD, FACP
Director of Medical Education, Centra
September 18, 2016
Why are you here today?
Objectives

• Appreciate how poetry can save lives

• List the similarities- poetry and medicine

• Have fun with poetry!
It is difficult
to get the news from poems
yet men die miserably every day
for lack
of what is found there

WC Williams, from Asphodel, that
Greeny Flower, 1947
• “That is why as a writer I have never felt that medicine interfered with me but rather that it made it possible for me to write. Was I not interested in man? There the thing was, right in front of me. I could touch it, smell it. It was myself, naked just as it was, without a lie telling itself to me in its own terms.”
What are the Similarities Between Medicine and Poetry?
Reading Patients, Reading Poems

- Detachment and empathy
- Tolerance for ambiguity
- Some meaning remains elusive
Reading Patients, Reading Poems

• The part and the whole

• Language and communication

• Intuition and Analysis
Walking the Dog

by John Wright, MD
Gravy

by Raymond Carver
The Real Work

by Wendell Berry
Why Read Poetry?
Why Read Poetry?

• To get the news!
• Some people think it’s fun!
• Sharpen language and observation skills
• Expand world of feeling and meaning
• Build resilience?
Barn Burned Down. 
Now I Can See the Moon.

Masahide, 17th century
Passage

by Marilyn Donnelly
Andrew Jager- Disclosure

Study was funded by American Medical Association (AMA), which is the authors’ employer. AMA employees were members of the research team that was responsible for the study design, conduct, analysis, and reporting.
Physicians and Sense of Calling

• Practice of medicine has long been seen as a calling

• Dik & Duffy (2009) defined calling as work that is:
  – personally meaningful and rewarding, and
  – serves a pro-social purpose

• Work as more than “simply a paycheck”
Consequences of Calling

• Sense of calling associated with greater work engagement and less turnover

• Sense of calling associated greater satisfaction when treating challenging clinical presentations (e.g., substance dependence and obesity)

• Contributes to public’s trust in the medical profession
Physician Burnout

• Rapid changes to physicians’ work experience
  – EHR, pay-for-performance, administrative burden
• Recent study found that for each hour of direct patient care, physicians spend nearly 2 hours performing administrative work
• Physician burnout is widely prevalent and increasing:
  – Between 2011-2014, prevalence increased by >10%
  – Half of physicians may now be experiencing burnout
Burnout and Calling

• Burnout characterized by:
  – Emotional exhaustion
  – Depersonalization
  – Decreased sense of personal accomplishment

• Burnout could “erode” physicians’ sense of calling

• Erosion may undermine physician work performance and trust in the patient-physician relationship
Study Design

- Mail survey of 4,000 practicing US physicians (excluding residents)
  - Random sample AMA Masterfile, inclusive of all specialties
  - 3 rounds of data collection between Oct 2014 & May 2015

- 411 found study ineligible
  - No longer practicing/no longer at clinic of record/survey returned as undeliverable
Data Sources

- Primary data (study survey):
  - Sense of calling (6 items)
  - Degree of professional burnout (single-item)
  - Practice setting (solo, group, hospital, med school, other)
  - Primary compensation (billing only, salary only, salary plus bonus, other)
  - Employment type (full- or part-owner, employee, independent contractor)
Data Sources

• Secondary data (AMA Masterfile):
  – Age
  – Sex
  – Race/ethnicity
  – Medical specialty (family medicine, internal medicine, ob/gyn, pediatrics, all others)
Measure of Calling

- Validated true-false items that assessed orientation toward work as a calling
  - Cognitive interviews to ensure consistent interpretation
- 6 items that measure “calling” orientation were used to assess sense of calling among physicians
  - Pearson correlation ≥0.2 ($P<.001$) with single-item measure of calling
  - 3 items related to work attitudes
  - 3 items related to behaviors
Burnout Measure

- Burnout was assessed with a single-item measure
- Correlated most strongly with the EE subscale of MBI
- Respondents indicate degree of burnout with a 5-point response scale
- “Not burned out” aggregated top 2 responses
  - “I enjoy my work. I no symptoms of burnout.”
  - “Occasionally I am under stress, and I don’t have as much energy as I once did, but I don’t feel burned out.”
Analyses

- Differences between respondents/non-respondents were assessed using $\chi^2$ and t-test
- Assessed frequency of key variables: calling and burnout
- Performed multivariable logistic regression to assess associations between burnout and calling items
  - 6 separate models with each calling item as dependent variable
  - Models adjusted for physicians’ personal and work-related characteristics
Results

- 2,263 respondents (63.1% response rate)

- Only observed difference between respondents and non-respondents was race/ethnicity

- Minority physicians were less likely to respond than those who were white
## Responses to Calling Items

<table>
<thead>
<tr>
<th>Calling Items</th>
<th>“True” Responses No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find my work rewarding.</td>
<td>2103 (93.2)</td>
</tr>
<tr>
<td>My work makes the world a better place.</td>
<td>2037 (91.3)</td>
</tr>
<tr>
<td>My work is one of the most important things in my life.</td>
<td>1738 (77.3)</td>
</tr>
<tr>
<td>I enjoy talking about my work to others.</td>
<td>1623 (72.1)</td>
</tr>
<tr>
<td>I would choose my current work life again if I had the opportunity.</td>
<td>1560 (70.1)</td>
</tr>
<tr>
<td>If I were financially secure, I would continue with my current line of work even if I were no longer paid.</td>
<td>994 (44.4)</td>
</tr>
</tbody>
</table>
## Responses to Burnout Measure

<table>
<thead>
<tr>
<th>Response Options</th>
<th>No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy my work. I have no symptoms of burnout.</td>
<td>425 (19.0)</td>
</tr>
<tr>
<td>Occasionally I am under stress, and I don’t always have as much energy as I once did, but I don’t feel burned out.</td>
<td>1175 (52.5)</td>
</tr>
<tr>
<td>I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion.</td>
<td>436 (19.5)</td>
</tr>
<tr>
<td>The symptoms of burnout that I’m experiencing won’t go away. I think about work frustrations a lot.</td>
<td>155 (6.9)</td>
</tr>
<tr>
<td>I feel completely burned out and wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help.</td>
<td>48 (2.1)</td>
</tr>
</tbody>
</table>
Find Work Rewarding by Degree of Burnout

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td>1523 (97.5)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td>382 (89.5)</td>
<td>0.20 (0.13-0.32); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td>108 (70.6)</td>
<td>0.06 (0.04-0.09); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td>31 (64.6)</td>
<td>0.05 (0.02-0.10); &lt;.001</td>
</tr>
</tbody>
</table>
Makes World Better by Degree of Burnout

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>“My work makes the world better place.”</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td></td>
<td>1453 (93.6)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td></td>
<td>369 (87.2)</td>
<td>0.48 (0.33-0.68); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td></td>
<td>123 (81.5)</td>
<td>0.31 (0.20-0.49); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td></td>
<td>40 (83.3)</td>
<td>0.38 (0.17-0.85); .02</td>
</tr>
</tbody>
</table>
## Most Important Thing by Degree of Burnout

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td>1273 (81.2)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td>297 (69.7)</td>
<td>0.57 (0.44-0.73); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td>95 (62.9)</td>
<td>0.41 (0.28-0.58); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td>29 (60.4)</td>
<td>0.38 (0.21-0.69); .001</td>
</tr>
</tbody>
</table>

“*My work is one of the most important things in my life.*”
Choose Work Again by Degree of Burnout

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td>1272 (81.8)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td>203 (48.1)</td>
<td>0.21 (0.16-0.26); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td>40 (26.8)</td>
<td>0.08 (0.05-0.12); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td>15 (31.9)</td>
<td>0.11 (0.06-0.20); &lt;.001</td>
</tr>
</tbody>
</table>
Enjoy Talking by Degree of Burnout

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td>1253 (79.9)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td>242 (56.7)</td>
<td>0.33 (0.26-0.41); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td>71 (46.4)</td>
<td>0.22 (0.15-0.31); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td>22 (45.8)</td>
<td>0.23 (0.13-0.41); &lt;.001</td>
</tr>
</tbody>
</table>

“I enjoy talking about my work to others.”
“If I were financially secure, I would continue with my current line of work even if I were no longer paid.”

<table>
<thead>
<tr>
<th>Extent of burnout</th>
<th>N (%)</th>
<th>OR (95% CI); P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not burned out</td>
<td>798 (51.3)</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>≥1 symptom of burnout</td>
<td>132 (31.1)</td>
<td>0.43 (0.34-0.54); &lt;.001</td>
</tr>
<tr>
<td>Think about work frustrations a lot</td>
<td>26 (17.0)</td>
<td>0.20 (0.13-0.30); &lt;.001</td>
</tr>
<tr>
<td>Completely burned out</td>
<td>12 (25.0)</td>
<td>0.30 (0.15-0.59); &lt;.001</td>
</tr>
</tbody>
</table>
Burnout May Erode Calling

While most physicians perceive a sense of calling, those who are burned out report less

Physicians with a sense of calling seem to be motivated by work that is personally meaningful and that promotes a “greater good” (i.e., prosocial)

A potential consequence of burnout is physicians becoming less intrinsically and pro-socially motivated

May come to see their work as “just a job,” or simply a way to earn a paycheck
Calling and Physician Motivation

• Intrinsic and prosocial motivation is associated with better performance especially for work that is complex
• Increase in burnout, which erodes calling, comes at time when “value-based incentives” (external) are increasingly targeting physician behavior/practice
• Payers, policymakers, practice leaders should take care to foster environment and incentives that support calling and prosocial motivations
Limitations

• Cross-sectional study cannot assess causality
• Good response rate, but minority physicians responded less frequently.
• Measure of calling may require additional validation
• Burnout incidence was lower than in some other recent studies
• Though widely used, single-item measure of burnout may not have assessed all aspects of burnout
Conclusion

• Professional burnout may erode physicians’ sense of calling

• Decreased sense of calling (work that is personally meaningful and serves greater good) may negatively affect physician performance and patient care

• Fostering a work environment that supports a sense of calling deserves greater attention
Questions or Comments

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Ethics Standards
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ASSOCIATION MÉDICALE CANADIENNE
CANADIAN MEDICAL ASSOCIATION
BMA
Predictors of life satisfaction among Norwegian medical doctors: a 15-year longitudinal, nationwide study (NORDOC)

Javed Iqbal Mahmood, MD¹, Kjersti Støen Grotmol, PhD¹,², Martin Tesli, PhD³, Torbjørn Moum, PhD¹, Reidar Tyssen, PhD¹

¹ Department of Behavioural Sciences in Medicine, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo, Norway
² Department of Oncology, Oslo University Hospital, Oslo, Norway
³ NORMENT, KG Jebsen Centre for Psychosis Research, Division of Mental Health and Addiction, Oslo University Hospital & Institute of Clinical Medicine, University of Oslo, Norway
Background

• Huge body of research on stress and burnout
• Increased rates of suicide and depressive symptoms
  (Gold et al 2013) (Mata et al 2015)
• Less attention paid to positive psychology (life satisfaction)
  (Tyssen et al 2009)
• We lack longitudinal studies of long-term work-related predictors
Aims

1. What *work-related factors* are associated with life satisfaction among doctors when controlled for other individual and life-style factors?

2. Are there any clusters in the trends of life satisfaction over this 15-year of medical career, and what factors predict a *decrease* in life satisfaction?
Methods (I)

Sample and study design

- Two nationwide cohorts that graduated 5-6 years apart
- Medical students from all four Norwegian universities

\[ N = 1052 \]

- Final year of grad. 4 years after grad. 10 years after grad. 15 years after grad.


Medical Student Cohort (N=421)


Young Doctor Cohort (N=631)

42% responded at all 4 time points
Methods (II)

Life satisfaction (T2, T3 and T4)

1. When you think about your life today, would you say that you are by and large satisfied with life, or are you mostly dissatisfied?

2. To what extent are you satisfied with your daily life situation?

3. Will you describe yourself mostly as? not happy - to very happy
Methods (III)

Predictor variables measured at T1

• Age (continuous variable)
• Gender
• Personality traits (BCI)
  - Vulnerability (Neuroticism scale)
  - Intensity (extroversion/introversion)
  - Reality weakness (chronic illusions, paranoid traits)
  - Control (obsessiveness or conscientiousness)
Methods (IV)

Variables measured repeatedly (T2, T3 and T4)

- Having children
- Married/cohabitant status
- Perceived social support
- Physical activity
- Religious activity
- Use of alcohol to cope with tension
- Hazardous drinking
- Life events during the past year was measured by 13-items
Methods (V)

Variables measured repeatedly (T2, T3 and T4)

- **Perceived job stress** (Modified Cooper Job Stress Questionnaire) with four factors:
  1. Emotional pressure
  2. Time pressure
  3. Fear of complaints and criticism
  4. Work-home interference

  (Røvik et al 2007)

- Number of hours at work per week
- Number of hours asleep when on call
Methods (VI)

Variables measured repeatedly (T2, T3 and T4)

• *Perceived job demands*

• *Autonomy*

• *Colleague support* measured by 2 items:

  1. To what degree are you taken care of by your colleagues?
  2. To what degree do you enjoy working with your colleagues?
Statistical analysis

• Mixed models repeated measures
• This method takes into account the association between measures of the individuals
• Utilizes longitudinal samples better and less vulnerable to missing data
• We applied K-means cluster analysis in order to identify subgroups based on the course of life satisfaction
Results (I)

Adjusted predictors of higher life satisfaction

*Low work-home stress*

*Low perceived job demands*

*High colleague support*

Female gender*

Being married/cohabitant**

Perceived social support**

Physical activity**

No use of alcohol to cope with tension**

No hazardous drinking*

Low neuroticism trait**

Low reality weakness trait*

Few life events**

*: P<0.05

**: P<0.001
Results (II)

Characteristics of the subgroups
We performed analysis on the dependent variable at T2-T4 with three clusters and found

1) Group with increasing life satisfaction (n=71)
2) Group with stable high life satisfaction (n=331)
3) Group with a decrease in life satisfaction (n=87)

Predictors of a decrease in life satisfaction
Neuroticism (OR=1.25, P=0.004)
Low colleague support (OR=0.84, P=0.021)
Strengths
• Longitudinal design, large sample, nationally representative sample
• Relatively high response rate
• Robust statistics that is less affected missing data

Limitations
• Use of self reported measures
• Dichotomized some of predictor variables
Conclusions and Implications

• Work-related factors that contributed to higher life satisfaction were:
  Work-home stress
  Perceived job demands
  Colleague support

• Predictors of a decrease in life satisfaction were:
  Neuroticism and low colleague support

• Beneficial effects of social support and life style factors (doing workout, cautious drinking behaviours) should also be emphasized.
Javed Iqbal Mahmood

Nothing to disclose
Interventions to Reduce Physician Burnout: A Systematic Review and Meta-Analysis

September 18, 2016

Presenter:
Colin P. West, MD, PhD
Division of General Internal Medicine
Division of Biomedical Statistics and Informatics
Mayo Clinic
Colin P. West, MD, PhD

Nothing to disclose
Objectives

• At the conclusion of this presentation, participants will be able to:
  – Summarize existing literature on interventions to reduce physician burnout.
  – Distinguish between individual-focused and structural/organizational strategies.
  – Identify gaps in knowledge of interventions to address physician burnout.
Burnout among Practicing Physicians


<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td>45.8%</td>
<td>54.4%</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>37.9%</td>
<td>46.9%</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>29.4%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Dissatisfied with work-life balance</td>
<td>36.9%</td>
<td>44.5%</td>
</tr>
</tbody>
</table>
Consequences of Physician Burnout

- Medical errors\(^1\)-\(^3\)
- Impaired professionalism\(^4\)-\(^6\)
- Reduced patient satisfaction\(^7\)
- Staff turnover and reduced hours\(^8\),\(^12\)
- Depression and suicidal ideation\(^9\),\(^10\)
- Motor vehicle crashes and near-misses\(^11\)

<table>
<thead>
<tr>
<th>Key Driver</th>
<th>Individual</th>
<th>Organizational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload</td>
<td>Part-time status</td>
<td>Productivity targets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duty Hour Requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Integrated career development</td>
</tr>
<tr>
<td>Work Efficiency/Support</td>
<td>Efficiency/Skills Training</td>
<td>EMR (+/-?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff support</td>
</tr>
<tr>
<td>Work-Life Integration/Balance</td>
<td>Self-care</td>
<td>Meeting schedules</td>
</tr>
<tr>
<td></td>
<td>Mindfulness</td>
<td>Off-hours clinics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curricula during work hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial support/counseling</td>
</tr>
<tr>
<td>Autonomy/Flexibility/Control</td>
<td>Stress management/Resiliency</td>
<td>Physician engagement</td>
</tr>
<tr>
<td></td>
<td>Mindfulness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engagement</td>
<td></td>
</tr>
<tr>
<td>Meaning/Values</td>
<td>Positive psychology</td>
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<td>Work/learning climate</td>
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</table>
Prior Reviews

• Systematic reviews on physician burnout interventions:
  – Have not focused on physicians
  – Have not focused on burnout
  – Have not been systematic in searching for all available evidence
Methods

• Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West 2016 In Press, Lancet):
  – Conducting according to PRISMA reporting outline
  – Comprehensive search strategy developed by experienced medical librarian (MEDLINE, Embase, PsycINFO, Scopus, ISI Web of Science, ERIC), inception to 1/2016
  – All decisions made independently and in duplicate
Methods

• Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West 2016 In Press, Lancet):
  – Included all studies offering comparative data on the effect of an intervention affecting physician burnout
    • Physician-specific data obtained by author contact when needed
  – Excluded medical students, non-physicians
  – Required burnout metric satisfying standard validity criteria
  – No language restrictions
Methods

• Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West 2016 In Press, Lancet):
  – Outcomes:
    • Overall burnout rate
    • Rate of high emotional exhaustion
    • Rate of high depersonalization
    • Emotional exhaustion score
    • Depersonalization score
The Evidence in Total

• Records identified: 2617
  – Records excluded: 2387
• Full-text articles assessed for eligibility: 230
  – Full-text articles excluded: 178
• Studies included: 52 (15 RCT, 37 cohort)
  – kappa = 0.83
The Evidence in Total

• Overall summary:
  – 15 RCT’s:
    • Structural/organizational: n=3
      – Shorter attending rotation length, modified clinical work processes, shorter resident shifts
    • Individual-focused: n=12
      – Facilitated small group curricula, stress management training, MBSR, communication skills training
The Evidence in Total

• Overall summary:
  – 37 cohort studies:
    • Structural/organization: n=17
      – US duty hour requirements, practice delivery changes
    • Individual-focused: n=20
      – Facilitated and nonfacilitated small group curricula, stress management training, MBSR, communication skills training
The Evidence in Total

• Overall burnout:
The Evidence in Total

• High emotional exhaustion:
The Evidence in Total

• High depersonalization:
The Evidence in Total

• Emotional exhaustion score:
  – 40 studies
  – Mean reduction 2.65 points (95% CI 1.67-3.64)
  – High I² (82%), but absolute differences across studies generally small

• Depersonalization score:
  – 36 studies
  – Mean reduction 0.64 points (95% CI 0.15-1.14)
  – High I² (58%), but absolute differences across studies generally small
The Evidence in Total

- Broad range of modestly effective interventions
- Benefits similar for individual-focused and structural interventions
  - (but we need both)
- No clear differences in benefits across specific classes of interventions (MBSR, facilitated small groups, DHR, etc.)
  - (we need all of them)
Limitations

- Cannot determine most effective single interventions
- Limited number of RCT’s
- Effect of interventions in combination unknown
- Sustained intervention effects uncommonly assessed
Thank You!

• Email: west.colin@mayo.edu
• Twitter: @ColinWestMDPhD

• Collaborators:
  – Lotte N. Dyrbye, MD, MHPE
  – Patricia J. Erwin, MLS
  – Tait D. Shanafelt, MD
Oral presentations

Sunday, September 18, 2016
4:30pm – 5:30pm

Note: All presentations may not be included as we are still collecting the final presentations from presenters, some may have been omitted for copyright purposes. Check back periodically for updates.
INCRESSING JOY IN MEDICINE

AMERICAN MEDICAL ASSOCIATION | CANADIAN MEDICAL ASSOCIATION | BRITISH MEDICAL ASSOCIATION

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A systematic review of physician and medical student resilience and wellbeing programs

Dr Malcolm Forbes, Melbourne, Australia
What you can take away

- Ideas for programs you might wish to implement at your local institution (for those new to this topic)

- Ideas on how we might improve resilience and wellbeing programs (for those established)
Why?

- Masochistic tendencies?
- Competitive tendencies?
- Obsessive tendencies?
Daddy, do you like my picture?

Honey, if you'd like me to be objective, I'll have to create a rubric.
Deaths of four medical trainees raises questions about study intensity

774 ABC Melbourne
Updated 3 Feb 2015, 3:34pm

The recent sudden deaths of three trainee psychiatrists and a hospital intern in Victoria have raised concerns about the intensity of their studies and workload.

The three psychiatric trainees were working at St Vincent's, Austin, and Frankston hospitals, while the intern was one week into an internship at Geelong Hospital.

Beyond Blue's doctors' mental health program chairman Mukesh Haikerwal said while he did not know the circumstances of the deaths, he was concerned there was not enough support for medical professionals.

"Just because you are a training or training-to-be medical professional does not mean that you are immune from mental health problems," he said.

"You do need to seek help. You need to have help. You need to have systems in the workplace."
Objective

A systematic review of medical student and physician resilience and wellbeing programs internationally… to guide the development of future programs
Records identified through database searching (PubMed, Scopus, Cinahl, PsychInfo) (n = 294)

Additional records identified through other sources (n = 3)

Records after duplicates removed (n = 240)

Records screened (n = 240)

Records excluded (n = 201)

Full-text articles assessed for eligibility (n = 39)

Full-text articles excluded (no control group included) (n = 23)

Studies included in qualitative synthesis (n = 16)

Studies included in quantitative synthesis (meta-analysis) (n = 0)
Records identified through database searching (PubMed, Scopus, Cinahl, PsychInfo) (n = 294)

Additional records identified through other sources (n = 3)

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Full-text articles assessed for eligibility (n = 39)

Full-text articles excluded (no control group included) (n = 23)

Studies included in qualitative synthesis (n = 16)

Studies included in quantitative synthesis (meta-analysis) (n = 0)
What did we find?

- 16 studies
- 13 randomized, controlled
- 10 medical student
- 13 follow-up < 3 months
- Group discussions (10); mindfulness-based stress reduction (6); meditation or breathing techniques (3); didactic teaching (3); homework assignments (2); One-on-one sessions (1); audio material (1)
What did we find?

• 40 different outcome measures
• Most common Maslach Burnout Inventory (MBI) and Perceived Stress Scale (PSS)
• ** All studies reported significant improvement in at least one measure **
• Statistical significance ≠ clinical significance
Ebbinghaus’ Forgetting Curve

(How much of something do we forget each day?)

- very quick loss
- 20 min (58% left)
- 1 hour (44% left) ...already halfway gone!
- 1 day (33% left)
- 6 days (25% left)
Limitations

• Methodological problems

• English
Take home points

1. Do something!

2. Evaluate, please… (greater consensus needed on most appropriate outcome measures)

3. Don’t try to reinvent the wheel (replicate, replicate, replicate)
Australian context
Resilience on the Run: New program helps junior doctors recognise emotional fatigue and pressures

By Alyse Edwards
Updated 2 Oct 2015, 2:26pm

A central Queensland hospital is leading the way in helping junior doctors cope with high levels of stress and anxiety.

The Australian Medical Association (AMA) of Queensland has launched the Resilience on the Run pilot program in Rockhampton in the hope it could soon be rolled out across the country.

Psychiatrist Ira van der Steenstraten said the four-week course taught junior doctors to recognise the emotional fatigue and pressures associated with the job.

"In the medical profession you deal with a lot of stresses," Dr van der Steenstraten said.

"You work long hours, night shifts, you have to deal with really complex problems, even have to deal with situations that might traumatisre yourself ... and this can have real negative mental health impacts if you don't have the necessary coping mechanisms.

"We're very good at taking care of others but a lot of them are not so good at taking care of themselves, and that really is what this program is all about - really to teach them to take care of themselves otherwise you can't take care of others."
Keen to collaborate?

• Please come and say hi / get in contact with me here:

  Malcolm Forbes  @malforsbes
  MalcolmPForbes@gmail.com
Co-authors

- Dr Lisa Byrom MBBS
- Dr Bavahuna Manoharan MBBS
- Dr Ira van der Steenstraten MBBS
- Dr Alex Markwell MBBS (Hons)
- Dr Margaret Kay MBBS (Hons) PhD
Thank you

i’m depressed
Thank you

• Please come and say hi / get in contact with me here:

  Malcolm Forbes  @malforbes
  MalcolmPForbes@gmail.com
The relationship between support to and surveillance of colleagues

A qualitative study of peer counselling.

Karin Isaksson Rø
MD, PhD, MHA
Director of the Institute for studies of the Medical Profession
Norway
The authors:

Karin Isaksson Rø
Frode Veggeland
Olaf Aasland

have nothing to disclose
**Support and Surveillance**

<table>
<thead>
<tr>
<th>Collegial support</th>
<th>Treatment</th>
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<tbody>
<tr>
<td><strong>Surveillance</strong></td>
<td><strong>Disciplining</strong></td>
</tr>
</tbody>
</table>

- Substance dependence, impaired doctors. Brewster et al., 2008; Ikeda and Pelton, 1990
- Center for professionalism and peer support. Shapiro et al, 2014
- Doctor advisory service, BMA
During this session we will:

- reflect upon the importance of support and surveillance in peer counselling
- see how the balance between formal and informal elements in a peer counselling scheme can be studied by using a qualitative study design
- discuss what an optimal balance between support and surveillance can mean in relation to peer counselling
Material and methods:

Peer counsellors from all counties (61/84)
- 50% women, 60% GPs
- experienced doctors

- 14 focus group interviews (2-8 / group)
- Recording and transcription
Analyses

1. Systematic text condensation: Coding of data set – themes - gradually refined

2. Integrating theory-driven (deductive) with data-driven (inductive) approach

3. non-linear process - going back and forth between theory application, data generation and concept development

Malterud 2012, Fereday and Muir-Cochrane 2006, Braun & Clarke 2006
Theory: related to surveillance and support

Basic logics of human behaviour
March and Olsen 1989

Hard Governance
- external incentives
  rewards / sanctions
- hierarchy and consequences
- procedures

Soft governance
- intrinsic motivation,
- dialogue
- equity and persuasion
- individually tailored solutions

Mörth 2004; Healy and Braithwaite 2006; Levi-Faur, 2011
Ideal roles

«Informal peer counsellor»
Ideal roles

«Formal peer counsellor»
Peer counsellor

Accessibility

Registration and remuneration
«But I don´t think I am very good at defining which role I have, which title I use in a given situation. Am I a peer counsellor, am I a colleague or am I a friend in times of need? And it doesn´t really matter, you still act the same way»

«A tension between the good deed and the registering of the good deed»
Peer counsellor

Accessibility

Registration and remuneration

Adequate help
• «Even though we say clearly that we don´t give treatment through this program, it´s all the same difficult not to take responsibility in one form or another, morally if not legally, if things don´t go well with the colleague»
To conclude

- Design and degree of formalisation is of importance.
- More formalisation – weaken advantages of collegiality.
- Less formalisation – unpredictable service, increasing risks.
- Criteria clarifying limits of collegiality??
- On-going awareness and discussion of formal and informal elements needed.
Peer counselling for doctors in Norway: A qualitative study of the relationship between support and surveillance

Karin Isaksson Rø, Frode Veggeland, Olaf G. Aasland

LEFO – Institute for Studies of the Medical Profession, Postboks 1152 Sentrum, 0107, Oslo, Norway

Department of Health Management and Health Economics, Institute of Health and Society, University of Oslo, Postboks 1089, Blindern, 0317, Oslo, Norway
Well balanced support to doctors – Joy in medicine

Thank you!
INCREASING JOY IN MEDICINE

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Mindful Medical Practice

*Can modified mindfulness education improve student resiliency, coping and stress management?*

Drs. Tatiana Rac, Anita Chakravarti

University of Saskatchewan
No Commercial Disclosures

Dr. Tatiana Rac
Research grant recipient from the Canadian Physician Health Institute (CPHI)

Dr. Anita Chakravarti
Research grant recipient from the CPHI
CEO of [M]Power: Mindful Professional Practice
Learning Objectives

At the end of this session, participants will be able to:

1. Identify relevant research linking mindfulness and physician wellness including resilience, compassion, burnout, quality of care.

2. Discuss the benefits of mindful medical practice sessions over a short time period

3. Describe the challenges with implementing and participating in the sessions
Mindfulness

DEFINITION
“the awareness that emerges through paying attention, on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment”

GOLD STANDARD
• Mindfulness Based Stress Reduction
  – U of Massachusetts 1979
  – Secular, biomedical 8 week program
  – Jon Kabat-Zinn
• Mindful Communication
  – U of Rochester
  – Krasner and Epstein et al
Why was this study implemented?

Benefits of Mindfulness

- Improved quality of life
- Symptom severity, coping, patient outcomes
- Decreased burnout
- Increased compassion
- Role in quality improvement and patient safety
Why was this study implemented?

Considerations of MBSR 8 week course

– Relevance
– Applicability
– Time
– Financial
– Other

Do weekly practice sessions impact students?

– resiliency, stress, coping skills, self-care
– likelihood to do MBSR
Mindful Medical Practice
MMP - Intervention

- 6-8 one-hour sessions
- Modified mindfulness-based intervention
- Body scanning, mindful breathing, sitting, walking, eating, communication, other
- Monitored attendance
Recruitment

How did we make it relevant and applicable to their personal and professional lives?

- intro to mindfulness lecture
  - Within curriculum (69% interested)
  - Optional, during lunch hour (54% interested)
• n = 200 1st yr med students
• 100 (2013-14) and 100 (2014-15)
• 3 groups
  – MMP intervention (n=20, n=19)
  – interested but not randomly selected (n=59, n=35)
  – not interested (n=21, n=46)
Quantitative/Qualitative Data

- 6 x on-line surveys
  ✓ >70% survey response rate
  ✓ Baseline, post-intervention, 1 year follow-up
  ✓ Resilience, stress, coping, College of Medicine competencies

- 6 x focus groups, 2 x facilitator interviews

Image: flickr CraigTaylor74
Results

• MMP participants vs. interested
  – ↑ resilience, ↓ negative coping, ↓ perceived stress
  – More likely to participate in MBSR
  – ↑ self-compassion
    • Less “guilt” during self-care & social events -> improved relationships
  – benefits wean off at 1 year without regular practice
  – ↑ focus/quiet mind during exams & extra-curricular events
Results

• Not-interested vs. interested
  – ↓ negative coping, ↓ perceived stress
  – no stat sig diff with MMP participants

• General Findings
  – Significant demand & satisfaction level for MMP
  – MMP intro sessions set foundation for ongoing practice
  – **Time** biggest barrier for MMP + MBSR
  – #1 stressor in med school was found to be a lack of time
Recommendations

• Logistics
  • room, practice sessions, group size, remuneration, attendance and scheduling

• Format
  • 2 hour intro workshop + weekly practice sessions

• Education
  • students to become aware of mindfulness as **OPTION** for themselves or patients
Recommendations

• Sustainability
  • institutional support
  • selective (not mandatory)

• Next steps
  • ongoing demand with continuing challenges to implementation & sustainability

Questions
A Randomized Controlled Trial Evaluating the Effect of COMPASS (COlleagues Meeting to Promote And Sustain Satisfaction) Small Group Sessions on Physician Well-Being, Meaning, and Job Satisfaction

September 18, 2016

Presenter:
Colin P. West, MD, PhD
Division of General Internal Medicine
Division of Biomedical Statistics and Informatics
Mayo Clinic
Colin P. West, MD, PhD

Nothing to disclose
Objectives

At the conclusion of this presentation, participants will be able to:

- Report results of an intervention to promote physician well-being.
- Describe a small group curriculum to promote meaning in work.
- Identify key metrics influenced by well-being promotion strategies.
## Burnout among Practicing Physicians


<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2014</th>
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<tbody>
<tr>
<td>Burnout:</td>
<td>45.8%</td>
<td>54.4%</td>
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<tr>
<td>Emotional exhaustion:</td>
<td>37.9%</td>
<td>46.9%</td>
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<tr>
<td>Depersonalization:</td>
<td>29.4%</td>
<td>34.6%</td>
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<tr>
<td>Dissatisfied with work-life balance:</td>
<td>36.9%</td>
<td>44.5%</td>
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</table>
Consequences of Physician Burnout

- Medical errors\(^1\)-\(^3\)
- Impaired professionalism\(^5\),\(^6\)
- Reduced patient satisfaction\(^7\)
- Staff turnover and reduced hours\(^8\)
- Depression and suicidal ideation\(^9\),\(^10\)
- Motor vehicle crashes and near-misses\(^11\)

## Physician Well-Being: Approach Summary

<table>
<thead>
<tr>
<th>Key Driver</th>
<th>Individual</th>
<th>Organizational</th>
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<td>Productivity targets</td>
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<td>Duty Hour Requirements</td>
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<td>Integrated career development</td>
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<td>Work Efficiency/Support</td>
<td>Efficiency/Skills Training</td>
<td>EMR (+/-?)</td>
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<td>Staff support</td>
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<td>Work-Life Integration/Balance</td>
<td>Self-care Mindfulness</td>
<td>Meeting schedules</td>
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<td>Off-hours clinics</td>
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<td>Curricula during work hours</td>
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<td>Financial support/counseling</td>
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<td>Autonomy/Flexibility/Control</td>
<td>Stress management/Resiliency Mindfulness Engagement</td>
<td>Physician engagement</td>
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Intervention Trial

- Prior RCT of facilitated small groups of 6-8 physicians (West CP et al., JAMA Int Med. 2014;174:527-33) demonstrated:
  - Reduced depersonalization
  - Increased meaning

- Current RCT addressed more efficient small group model
  - Self-formed groups of 6-8 physicians
  - Meet every other week for 1 hour at time/location of group’s choosing
  - At least 15 minutes dedicated to curriculum
  - No FTE payment, but payment for meals (US$20 per meal per person)
  - 12 sessions over 6 months
DOM faculty
N=550

Volunteers
N=125

Non-volunteers
N=425

Intervention
N=64

Waitlist Control
N=61

Current Practice
Intervention Trial

- Participants:
  - 57% men (DOM ~70%)
  - 46% generalists (DOM ~25%)
- Prior data suggests generalists and women may have higher rates of burnout and many other markers of distress.
Intervention Trial

- Topics: 3 categories rotating across 12 sessions
  - Meaning in work/job satisfaction
    - E.g., “Reflect as a group on why you do the work you do?”
  - Teamwork/social support/collegiality/relationships/work-life balance and integration
    - E.g., “Brainstorm ways to promote collegiality in your hallway or work unit.”
  - Personal strengths/problem solving/coping/resources for thriving and flourishing
    - E.g., “Talk about a work-related problem that has been bothering you. Give each other advice about how best to handle the situation. Then, come up with a plan of action to solve the problem.”
Intervention Trial

• Measures:
  • QOL: LASA single item
  • Meaning: Empowerment at Work Scale
  • Burnout: Full MBI (trial groups) and 2-item MBI (non-study group)
  • Social Isolation PROMIS
  • Physician Job Satisfaction Scale

• Analyses:
  • GEE repeated measures models for changes from baseline
Results
Results

• Comparison of trial arms with DOM non-study participants where possible, using data from the annual DOM surveys coordinated by the PPWB (n=275 responding to both 2013 and 2014 surveys)
  – Timing matches baseline and 12 month (6 month post-study) surveys from intervention trial
  – Allows “usual care” control arm, control for secular trends
  – Analyses adjusted for baseline levels of burnout, etc. to account for baseline differences across groups
Strongly Agree That Work is Meaningful

% Change from Baseline

Baseline 6 Months 12 Months

2-group: p<0.05
3-group: p<0.05

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High Emotional Exhaustion

- Baseline
- 6 months
- 12 months

2-group: p=NS
3-group: p<0.05

Intervention
Control
Non Study
High Depersonalization

Baseline 6 12

% 15
10
5
0
-5
-10
-15

<table>
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<th></th>
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<th>Control</th>
<th>Non Study</th>
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<tr>
<td>2-group:</td>
<td>p&lt;0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-group:</td>
<td>p&lt;0.05</td>
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Overall Burnout

- 2-group: p=NS
- 3-group: p<0.05
Overall QOL

- Intervention
- Control
- Non Study

2-group: p<0.05
3-group: p<0.05
Poor QOL (LASA\(\leq 5\))

![Graph showing poor QOL (LASA\(\leq 5\))](image)

- **Intervention**
- **Control**
- **Non Study**

2-group: p<0.05
3-group: p<0.05
Social Isolation (PROMIS)

Baseline 6 12

Axis Title

Intervention
Control

2-group: p<0.05
Job Satisfaction (Agree/Strongly Agree)

![Graph showing job satisfaction over time for intervention and control groups.](image)

- **Intervention** line shows an increase from baseline to 6 months and remains stable until 12 months.
- **Control** line starts at a lower level than intervention, shows a decrease from baseline to 6 months, and remains stable until 12 months.

2-group: p<0.05
Leave in Next 2 Years >= Moderate

2-group: p<0.05
Limitations

• Single site, multiple IM specialties
• Volunteer bias:
  – Study participants more likely to be general internists, women
  – Baseline rates of burnout higher and QOL lower in study participants
    • Targets intended population
    • Ceiling/floor effects possible
• Further analyses by attendance rate, “was it worth it” questions pending
Conclusions

• At 12 months, compared to both the wait-listed control group and non-study participants, the intervention group had improved:
  – Meaning from work
  – Emotional exhaustion
  – Depersonalization
  – Overall burnout
  – Overall QOL
  – Social isolation at work
  – Job satisfaction
  – Likelihood of leaving in next 2 years

• An institutionally supported, modestly funded small group-based curriculum demonstrated positive effects across multiple domains relevant to physician well-being
Follow-Up

• In October 2015, Mayo Clinic offered this program to its physicians and staff scientists
  – Of 3700 eligible individuals, >1000 signed up in first 6 months
  – 6-month surveys showed 97% were satisfied with the groups and endorsed continuation of the program
Thank You!

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• Twitter: @ColinWestMDPhD

• Collaborators:
  – Lotte N. Dyrbye, MD, MHPE
  – Daniel Satele
  – Tait D. Shanafelt, MD