OBJECTIVE

Understand:

How telemedicine and clinical health technologies can reduce physician burnout and improve clinical efficiency and patient safety

FUTURE PHYSICIANS have excellent mental health...before training begins

- 400 physicians suicide each year
- Female physician suicides x2 gen population
- Over 50% of US physicians experience some sign of burnout
- 80% of burnout is related to organizational factors.
Health Issues in MD’s

- Burnout
- Disruptive Behavior
- Aging
- Psychiatric disorders
- Substance use disorders

What is burnout?

- Emotional Depletion
- Detachment and Cynicism
- Sense of low Personal Achievement
Burnout Drivers vs Effects

Drivers:
- high workloads
- workflow inefficiencies
- increased time spent in documentation

Effects:
- loss of meaning in work
- social isolation at work
- cultural shift from health values to corporate values

Repercussions at a personal and professional level

GOAL

- Achieve the Quadruple Aim, with the fourth aim being clinician well-being.
- Create a practice environment using health technologies that supports improved, practice efficiency and meaning.
- In return, a more engaged, satisfied workforce will provide better, safer, more compassionate care to patients.
Everyone blames the EMR

“I hear there’s a new ICD-10 code for carpal tunnel syndrome caused by clicking too many times in an EMR system.”

But were paper charts any better?
More Effective EMRs

- Redesigned workflows
- Improve documentation – avoid redundancy, short cuts, templates, dot.phrases, dictation software, scribes, smart devices
- Reduced documentation
- Improved physician/provider education – PEP at UCD – individualized and routine
- Easier to complete notes using telemedicine – synchronous and asynchronous

Telemedicine Advantages for Provider

- Time Savings
- Cost Savings
- Increased Variety
- Improved Safety and Teamwork
- Flexibility, Independence, and Autonomy
- Better Work-Life Balance
Flexibility, Independence, Autonomy

- Practice from any location
- Wellness, safety and work-life balance

Better Ways of Working – asynchronous and mobile consults
More teamwork, education, self-assessment and collaboration

Three Domains of the WellMD Fulfillment Model

**Culture of Wellness**: Shared values, behaviors, and leadership qualities that prioritize personal and professional growth, community, and compassion for self and others.

**Efficiency of Practice**: Workplace systems, processes, and practices that promote safety, quality, effectiveness, positive patient and colleague interactions, and work-life balance.

**Personal Resilience**: Individual skills, behaviors, and attitudes that contribute to physical, emotional, and professional well-being.
# Need for a Systematic Framework

**Problem:**
- No consistent method to evaluate technology’s impact on physician well-being
- Important issues are often overlooked

**Solution:**
- University of California Technology Wellness Index (UCTWI)
- A fast, easy, and consistent method
- Simple 8-point scale

## UC Technology Wellness Index
Simple 8-point scoring

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SUBCATEGORY</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency of Practice</td>
<td>Efficiency: Does the technology improve the physician’s overall efficiency in clinical and non-clinical work?</td>
<td>0 – 1</td>
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<tr>
<td></td>
<td>Clinical Productivity: Does the technology allow the physician to spend more time on direct patient care?</td>
<td>0 – 1</td>
</tr>
<tr>
<td>Meaning</td>
<td>Patient Engagement: Does the technology increase the quality of patient engagement with the physician?</td>
<td>0 – 1</td>
</tr>
<tr>
<td></td>
<td>Case Mix: Does the technology enable the physician to have more control over the case mix of their patient panel?</td>
<td>0 – 1</td>
</tr>
<tr>
<td></td>
<td>Teamwork: Does the technology create a more collaborative work environment?</td>
<td>0 – 1</td>
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<tr>
<td>Lifestyle</td>
<td>Time and Work-Life Balance: Does the physician have more time to spend outside of work?</td>
<td>0 – 1</td>
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<tr>
<td></td>
<td>Independence: Does the technology increase independence, schedule flexibility and autonomy for the physician?</td>
<td>0 – 1</td>
</tr>
<tr>
<td></td>
<td>Financial: Does the technology increase the physician’s income?</td>
<td>0 – 1</td>
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<tr>
<td>UCTWI Score</td>
<td></td>
<td>0 – 8</td>
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### Case 1: Synchronous Telepsychiatry

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<td>Clinical Productivity: Does the technology allow the physician to spend less time on non-clinical work?</td>
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<td>Meaning</td>
<td>Patient Engagement: Does this increase/decrease the proportion of time and the ease that the physician spends engaging with patients?</td>
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<tr>
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<td></td>
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<td>1</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>Time: Does the technology free up physician time away from work?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Independence: Does the technology increase independence, schedule flexibility and autonomy for the physician?</td>
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<tr>
<td></td>
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<td>UCTWI Score</td>
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### Case 2: Asynchronous Telepsychiatry

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<td>Financial: Does this affect the physician’s income?</td>
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</tr>
<tr>
<td>UCTWI Score</td>
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Augmented Information to help clinicians

- Open Records
- Artificial intelligence (the other AI) and predictive assessments—big data analytics on the fly—genomics/phenomics
- Automated data capture – multiple data sources for decision support including video
- Increasing mobile care and monitoring
- Virtual Reality and Avatar driven clinicians
- Algorithmic screening and social network interactions and monitoring
- Facial, voice and movement recognition
- And many more……..