ACPH 2019

AMERICAN CONFERENCE ON PHYSICIAN HEALTH

AMA AMERICAN MEDICAL ASSOCIATION

MAYO CLINIC

Stanford MEDICINE

Disclosures

Conflict of interest: CommunifyHealth.

Application of Best Practices from High Reliability Organizations to Advance Overall Wellness of Providers

Description of the workshop:

The goal of this workshop is to improve overall wellness of providers through application of formal human factors and barriers management principles to improve patient safety and care delivery processes.

Learning objectives:

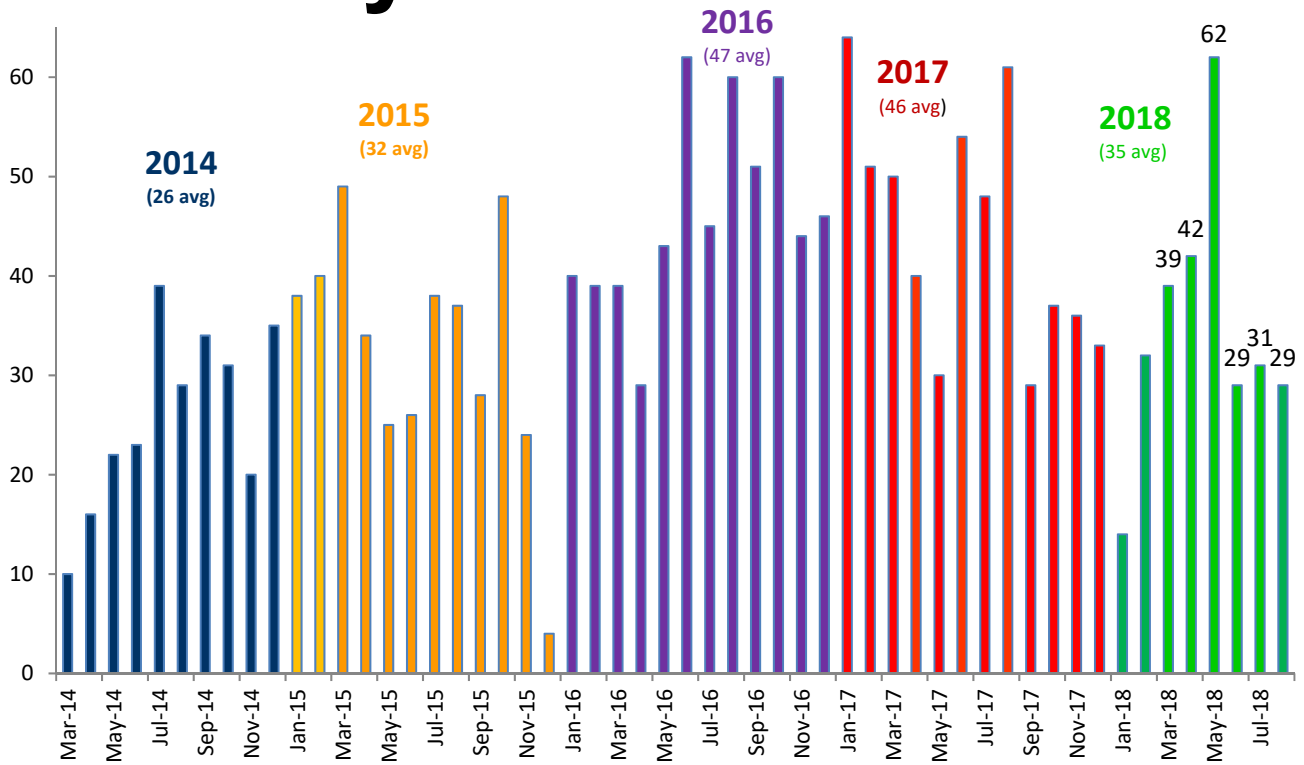
- To develop care delivery processes using barriers management principles, which are defined as the associated process steps, safeguards, and safety barriers.
- Apply human factors engineering and Lean thinking for problem solving to spearhead continuous quality improvement efforts.

Identifying your interventions

Good Catch Program

A { **condition**
defect
event
situation
miscommunication } that could have or did result in { **harm**
delay
rework
waste
an error }

Total Monthly Good Catches



AMERICAN CONFERENCE ON PHYSICIAN HEALTH
ACPH 2019

Human Factors Analysis and Classification System (HFACS)

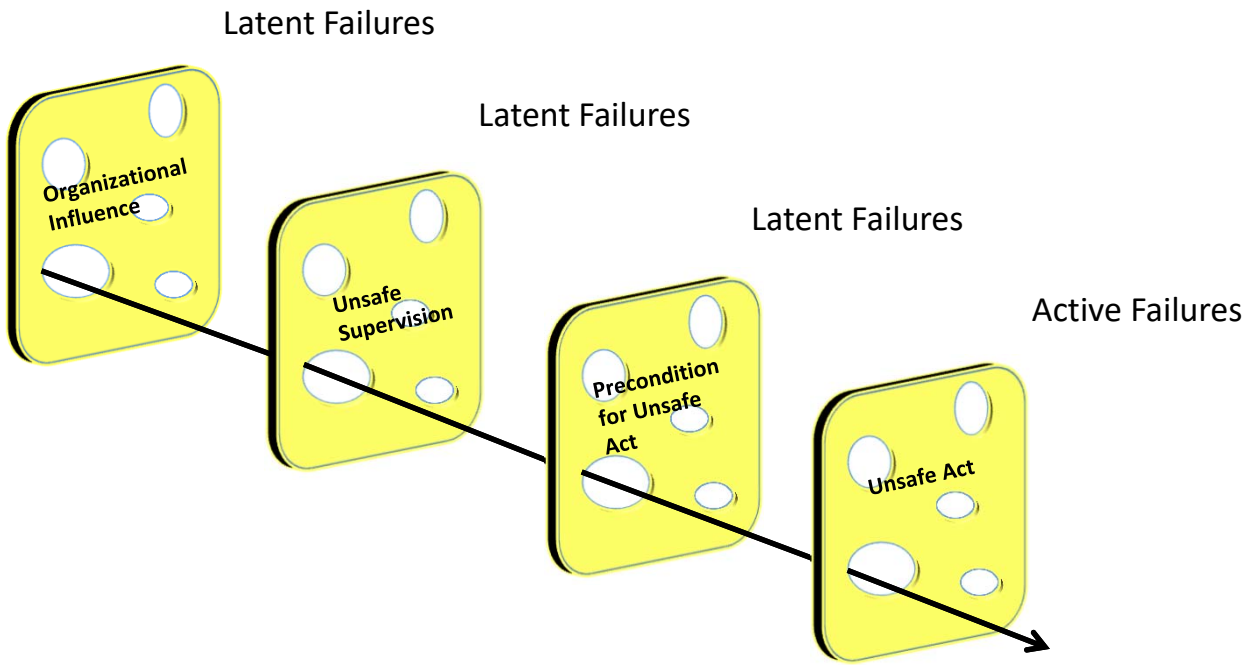
AMERICAN CONFERENCE ON PHYSICIAN HEALTH

ACPH 2019

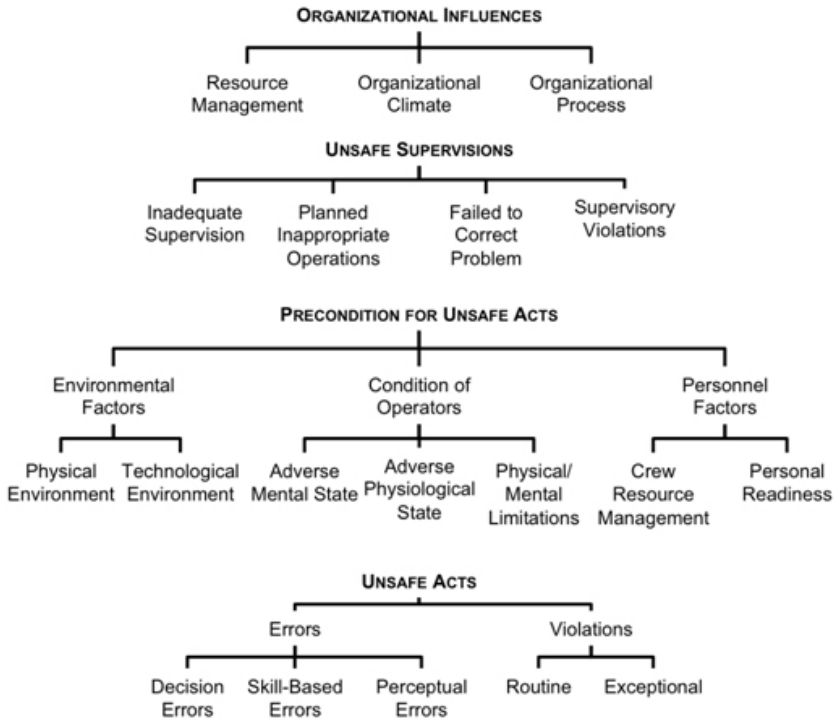
HFACS

- The human factors Analysis and Classification System (HFACS)
  - An investigation framework that utilizes system approach.
  - Originally developed by Weigmann and Shappell (1997)
    - 4 Main levels
    - 12 sub-levels
  - Aviation, nuclear power plants, road and rail transportation, healthcare etc.

Reason's Swiss Cheese Model for Human Error Causation (1990)



Human Factors Analysis and Classification System (HFACS)



https://www.skybrary.aero/images/7/7c/HFACS_Org_Inf.jpg

Actions

- Routine violation (workarounds, shortcuts)
  - An individual “bends the rules” in a manner that is culturally accepted or commonly done, with good intentions
    - e.g., Clinic is running behind, so the MD instructs the nurses not to check vitals or do an assessment, and just to room the patient
  - Delivery of care outside scope of practice
    - e.g., Clinic is running behind, so nurses are asked to do the status check independent of the MD
- Exceptional violation
  - Intentional rule-breaking that is not culturally accepted
    - e.g., Intentionally providing a wrong treatment to a patient

Types of errors

Communication:
-problems in interaction with patients
-problems in interaction between health care providers/staff

Studies:
- ordered incorrectly
- not ordered when indicated
- not done as ordered
- error in reporting results to provider
- error in responding to results

Administration:
- errors in handling/transmission of messages
- errors in appointment scheduling

Diagnosis:
- insufficient evaluation for diagnosis
- wrong and/or missed diagnosis based on available data

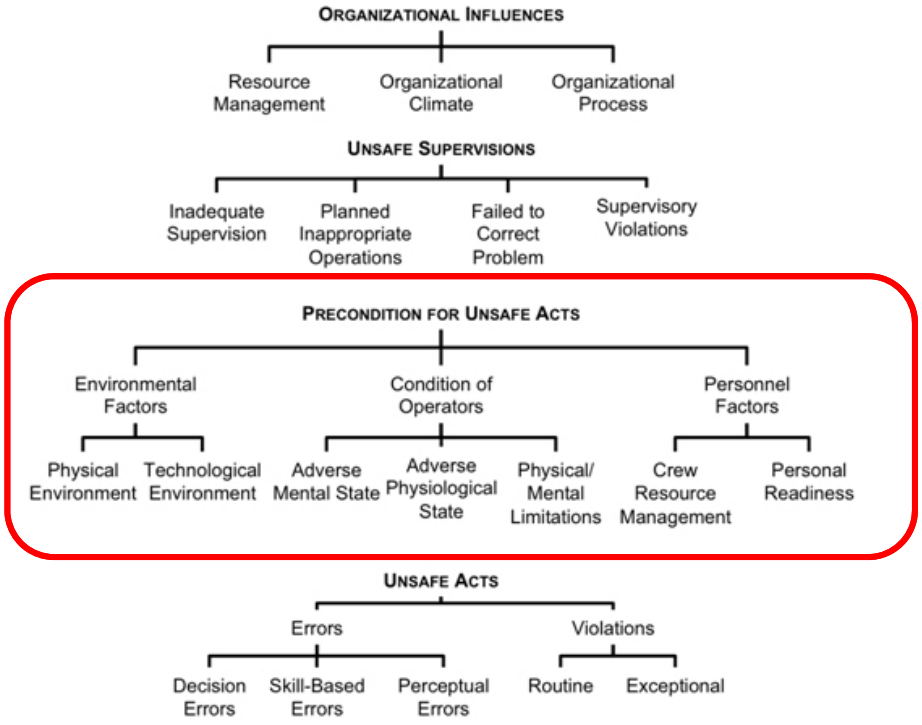
Medication:
- ordered incorrectly (wrong medication, wrong dose, or not indicated)
- no medication ordered when indicated
- not delivered as ordered

Records:
- incomplete
- incorrect

Exercise:
Your Turn to Submit
Good Catches

Collecting information in the context (how to better understand provider's burnout) – Sara

Human Factors Analysis and Classification System (HFACS)



https://www.skybrary.aero/images/7/7c/HFACS_Org_Inf.jpg

Contextual Inquiry Methodology

- Systems Analytic Approach to understanding the CONTEXT
  - Evidence-based
    - Rich observational data-driven process
    - Consolidated models of personas, roles & relationships, and breakdowns
  - Understand the people
    - Their motivations
    - Their experiences
  - Understand the roles
    - Each of the roles within the context
    - The interactions and relationships between the roles
  - Understand the breakdowns
    - Breakdowns in environment (e.g., technology, physical)
    - Breakdowns in roles/relationships
    - Breakdowns in process

She has practiced medicine over 12 years

She has clinic hours from 8:00 AM to 6 PM, 4 days a week

She provides care to 22-30 patients a day (at times 105 – 120% schedule utilization)

She is married and the mother of 2 children under age 10

3 hours into her shift, she's already received countless care-related communications (e.g., phone calls, pages, in-basket messages)

She is passionate about patient care

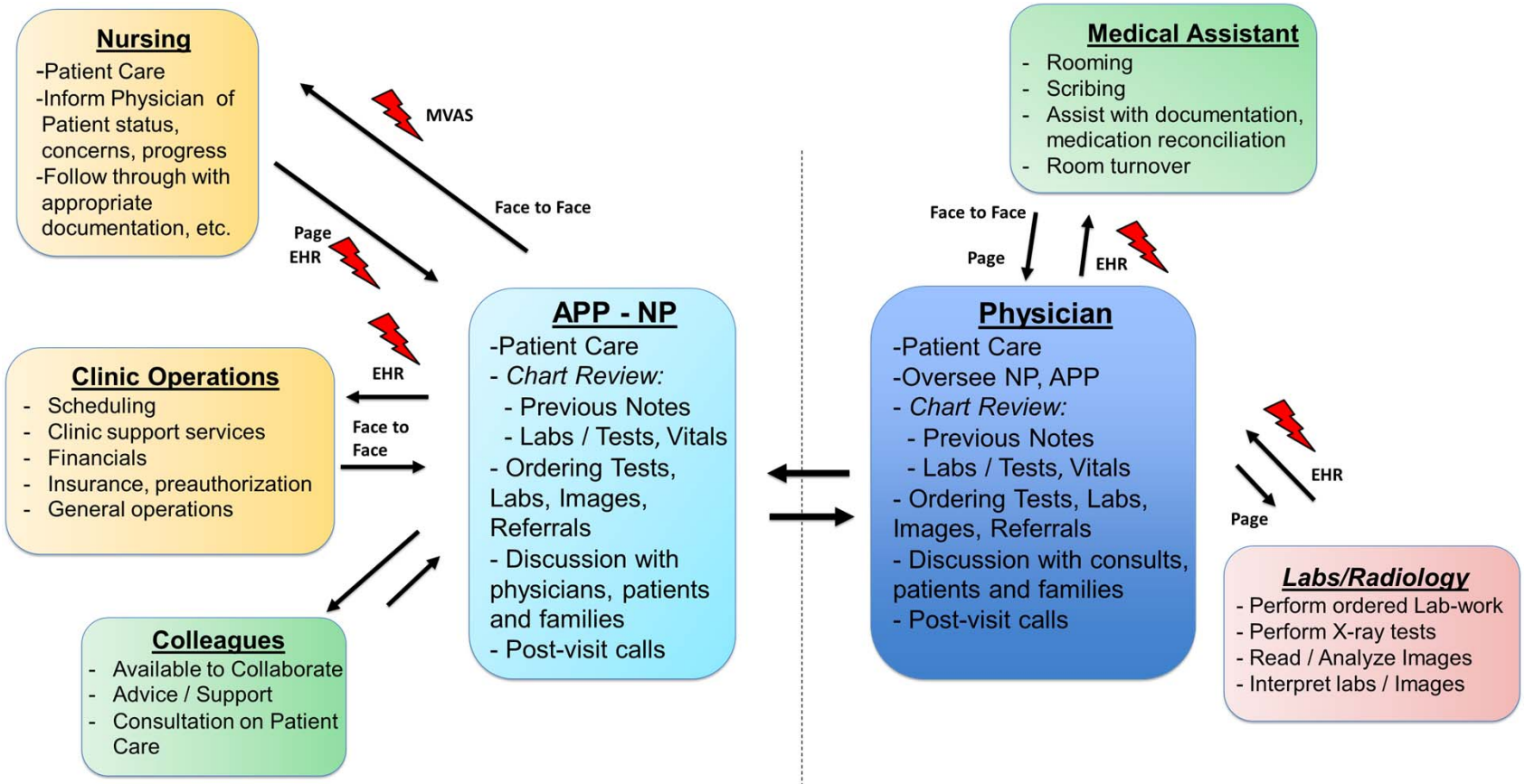
She's typically managing multiple patients concurrently, including numerous ad-hoc "work-ins"

She thinks its important to spend time talking and connecting with her patients

For every 15 minutes spent with patient, she spends 2 to 4 times that documenting in EHR

She enjoys joking with her colleagues "better to laugh some, than to always be crying"

She spends ~2 hours of "pajama-time" documenting in EHR


Nursing
-Patient Care
-Inform Physician of Patient status, concerns, progress
-Follow through with appropriate documentation, etc.
MVAS
Face to Face
Page
EHR
Medical Assistant
- Rooming
- Scribing
- Assist with documentation, medication reconciliation
- Room turnover
Face to Face
Page
EHR
APP - NP
-Patient Care
- Chart Review:
- Previous Notes
- Labs / Tests, Vitals
- Ordering Tests, Labs, Images, Referrals
- Discussion with physicians, patients and families
- Post-visit calls
Physician
-Patient Care
-Oversee NP, APP
- Chart Review:
- Previous Notes
- Labs / Tests, Vitals
- Ordering Tests, Labs, Images, Referrals
- Discussion with consults, patients and families
- Post-visit calls
EHR
Face to Face
Clinic Operations
- Scheduling
- Clinic support services
- Financials
- Insurance, preauthorization
- General operations
EHR
Page
Labs/Radiology
- Perform ordered Lab-work
- Perform X-ray tests
- Read / Analyze Images
- Interpret labs / Images
Colleagues
- Available to Collaborate
- Advice / Support
- Consultation on Patient Care

Relationships

Other Groups

Labs
- Missing/late lab results
- Wrong labs run
- Wrong time-stamp

Specialist Referrals
- Scheduling delays
- Incomplete treatment plan
- Missing Notes in EHR

Pharmacy
- Problems with prescriptions, authorizations
- Prescription renewals

Coordination of Care

Roles & Responsibilities
- Performing others' tasks
- Spending time tracking down test results
- Spending time tracking down specialist diagnoses
- Spending time documenting other's information in HER
- Spending time documenting "unnecessary" information

Communication

EHR

Notes
- Copious historical notes, too much information to attend to
- Superfluous or no longer relevant information
- Incomplete or missing notes

Medication Reconciliation
- Too many options
- Lack of integrity in information
- Cumbersome process, too many clicks

Documentation

Interruptions

Phone calls
- Patient questions
- Pharmacy
- Spending time tracking down specialist diagnoses

Paging
- Pages for non-urgent issues
- Too many pages
- Incorrect pages
- Incomplete information in page
- Paging system goes "dark"

Technology

Hardware
- Out-of-date hardware
- Computers that won't work
- Inaccessible printers
- Printers not networked

Software
- Out-of-date software
- Software incompatible or lack of integration
- Slow to load
- Glitchy – produces errors that need to be manually corrected

Physical Space

Work-space conditions

Work-Environment
- Not enough work stations
- Old equipment
- Poor lighting and ventilation
- Too much ambient sound
- Patient load increasing faster than physical space can accommodate
- Insufficient space for private conversations
- Insufficient "break" space

Exercise:
Prioritize Your Issues