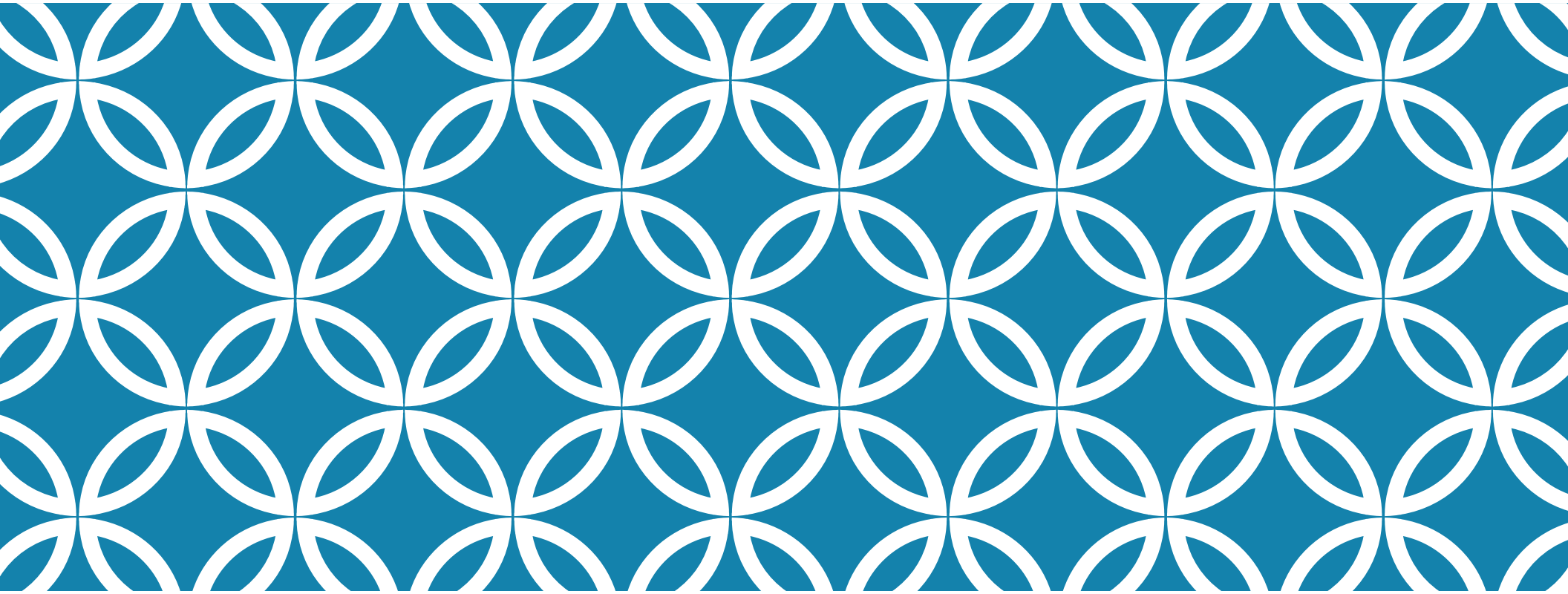


WHAT THE MEDICAL DIRECTOR NEEDS FROM STAFF TO IMPROVE PATIENT OUTCOMES

Leslie P. Wong, MD, MBA, FASN
35th Annual NANT Symposium
Wednesday, March 21, 2018
8:00-9:00 AM

DISCLOSURES

Employee of Cleveland Clinic

Consultant for Fresenius Medical Therapies

Board of Directors for Nephrologists Transforming Dialysis Safety

NTDS
NEPHROLOGISTS TRANSFORMING DIALYSIS SAFETY

https://www.asn-online.org

NEPHROLOGY IN THE US: BY THE NUMBERS

Patients with Kidney Failure

ESRD Patients Treated
660,000

Dialysis Patients
468,000

Functioning Kidney Transplant

193,000

Dialysis Facilities

Total Dialysis Facilities **6,479**

Hospital-based Dialysis Facilities

617

Adult Nephrologists

Direct Patient Care
10,108 (92.9%)

Administration
185 (1.7%)

Medical Teaching
183 (1.7%)

Medical Research
409 (3.8%)

TOTAL **10,883** (100.0%)

Approximately 25%-33% of practicing nephrologists are medical directors

Slide Courtesy of Alan Kliger, MD, Nephrologists Transforming Dialysis Safety

COMPLEXITY IN HEALTHCARE IS GETTING WORSE

Patients see a variety of clinicians for their care

- Medicare patients see an average of 7 physicians split between 4 practice locations

Involvement by multiple providers tends to blur accountability

- 75% of hospitalized patients cannot identify who is in charge
- 23% of ESRD patients did not know who their nephrologist is

Best care at lower cost: the path to continuously learning health care in America. Institute of Medicine. 2013
Sekar A, Wong LP. Patient engagement in ESRD: Do patients know who their nephrologist is? ASN Kidney Week 2017 (poster)

MISTAKES
FRAGMENTED CARE
MISSED PREVENTION

WASTES $185 BILLION PER YEAR IN THE U.S.

TABLE S-1 Estimated Sources of Excess Costs in Health Care (2009)

Category	Sources	Estimate of Excess Costs
Unnecessary Services	• Overuse—beyond evidence-established levels • Discretionary use beyond benchmarks • Unnecessary choice of higher-cost services	$210 billion
Inefficiently Delivered Services	• Mistakes—errors, preventable complications • Care fragmentation • Unnecessary use of higher-cost providers • Operational inefficiencies at care delivery sites	$130 billion
Excess Administrative Costs	• Insurance paperwork costs beyond benchmarks • Insurers' administrative inefficiencies • Inefficiencies due to care documentation requirements	$190 billion
Prices That Are Too High	• Service prices beyond competitive benchmarks • Product prices beyond competitive benchmarks	$105 billion
Missed Prevention Opportunities	• Primary prevention • Secondary prevention • Tertiary prevention	$55 billion
Fraud	• All sources—payers, clinicians, patients	$75 billion

SOURCE: Adapted with permission from IOM, 2010.

Best care at lower cost: the path to continuously learning health care in America. Institute of Medicine. 2013

IMPROVING PATIENT-CENTEREDNESS

Informed and engaged patients invested in their care do better

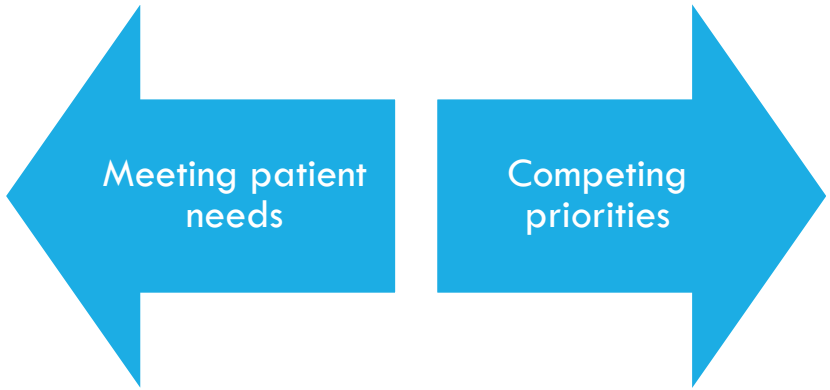
Patients do not understand risks and benefits of treatment

7 of 10 adults have difficulty making a doctor's appointment

5 of 10 adults don't get timely test results and coordination of care

Getting the right human being on the phone is sometimes impossible

Don't get sick on Fri-Sun or at night



Best care at lower cost: the path to continuously learning health care in America. Institute of Medicine. 2013

BARRIERS TO (SELF) MANAGEMENT IN CKD

- ✓Denial
- ✓Depression
- ✓Poor coping
- ✓Low literacy
- ✓Low cognition
- ✓Poor patient education
- ✓Prolonged dependence on family or others
- ✓Lack of integrated health systems

Source: Google images (labeled for noncommercial reuse)

Ferris M. Blood Purif 2015

DIALYSIS INTERDISCIPLINARY TEAM

Consists of, at <u>minimum</u>:

- The patient or patient's designee
- Registered nurse
- Physician treating the patient for ESRD
- Social worker
- Dietitian

V501, ESRD Interpretive Guidance, Medicare Conditions for Coverage (2008)

CMS: PATIENT CARE DIALYSIS TECHNICIANS

Any person who provides direct care to patients and who is not classified as another professional, e.g. nurse, dietitian, or social worker is a PCT

A biomedical technician or dialysis assistant would be classified as a PCT if he/she has responsibility for direct patient use or sets up machines

A technician who maintains or "takes down" machines is not considered a PCT

V692, ESRD Interpretive Guidance, Medicare Conditions for Coverage (2008)

WHAT TECHNICIANS NEED TO MASTER

Principles of dialysis

Care of ESRD patients, interpersonal skills

Dialysis procedures and documentation

Possible complications of dialysis

Water treatment and dialysate preparation

Infection control

Patient and staff safety

Dialyzer reprocessing, if applicable

V694, ESRD Interpretive Guidance, Medicare Conditions for Coverage (2008)

WHAT DIALYSIS TECHNICIANS ARE/DO

Technicians are a partner, not an assistant in delivering life-saving care

Must master a procedurally complex, intensive, dangerous process

Requires immediate critical thinking and quick reactions

Understanding of medication dosing (heparin, saline)

Applying physiology (diffusion, ultrafiltration, electrolyte balance)

Handle complex technology, equipment, water purification systems

Longitudinal relationships with patients and families

Concepcion, D. NNI Sept. 2016

Lifeline

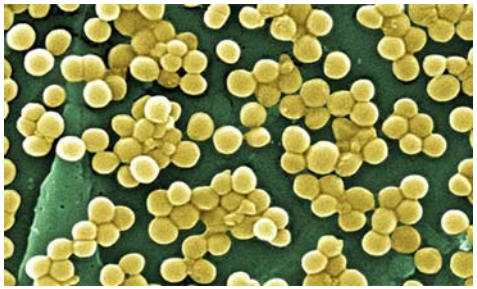
1. A line used for life-saving, typically used to rescue someone in difficulty
2. (in palmistry) predicts how long someone will live

ESRD PATIENT LIFELINES

CAUSE OF DEATH IN DIALYSIS PATIENTS

3 in 10 patient deaths are from sudden death

1 in 10 patient deaths are from infection



PEER Report: Dialysis Care & Outcomes in the U.S., 2014 |Hospitalization|

CAN WE SAVE PATIENTS FROM DROWNING?

Survey of ESRD patients admitted to the hospital

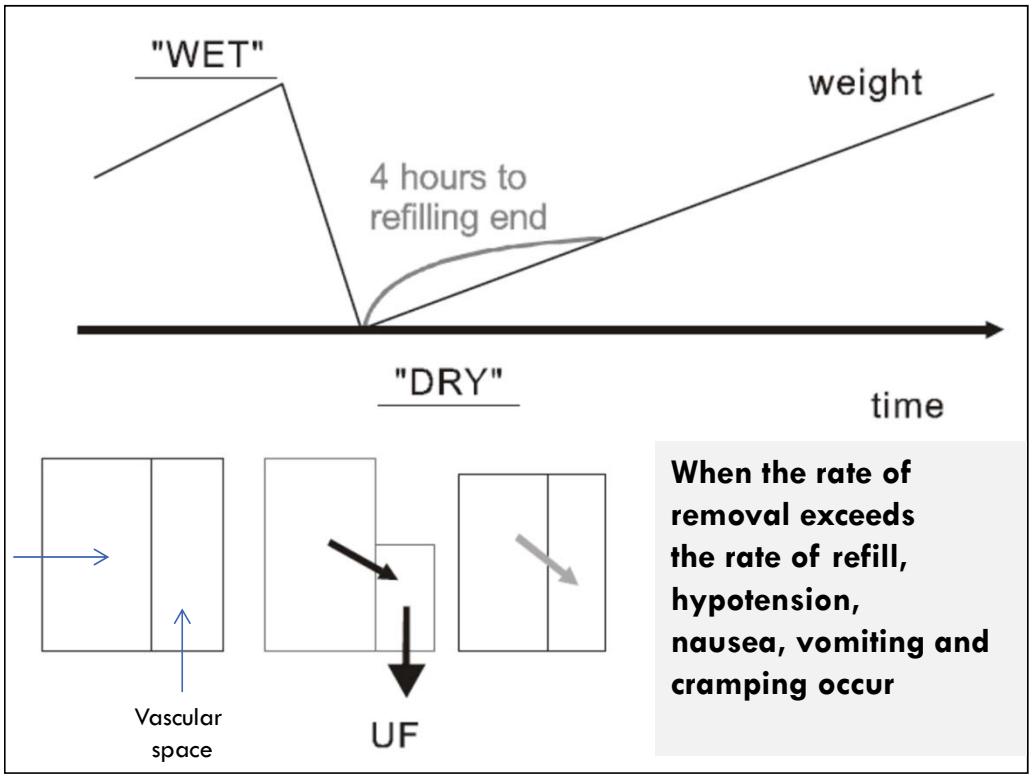
33% of patients did not know their dry weight

90% of patients reported that fluid restriction was important

Yet 60% admitted to noncompliance with fluid intake

Sekar A, Wong L ASN Kidney Week 2017 (abstract)

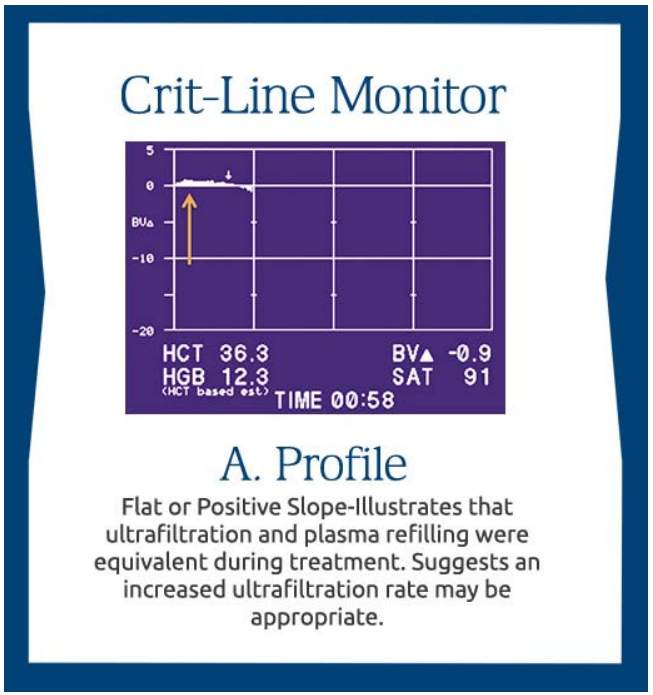
THE "UNPHYSIOLOGY" OF UF IN HEMODIALYSIS

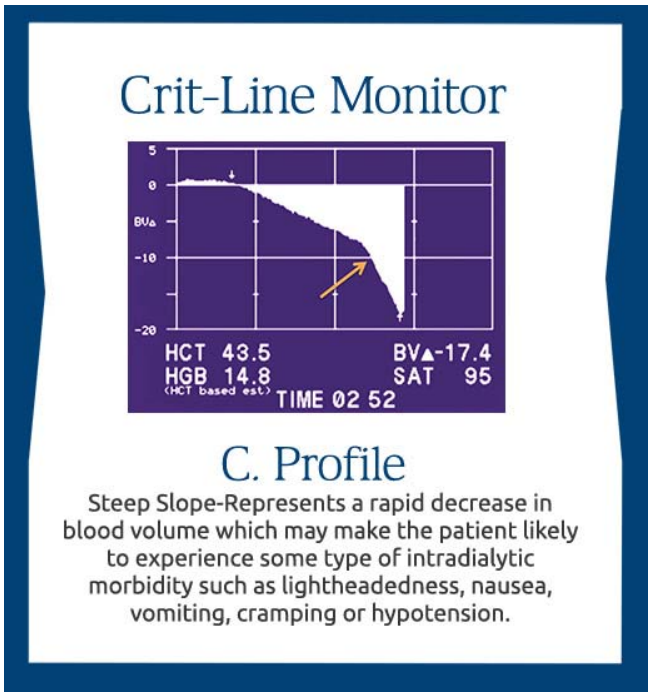


When the rate of removal exceeds the rate of refill, hypotension, nausea, vomiting and cramping occur

Kim G, Electrol Blood Press 2009

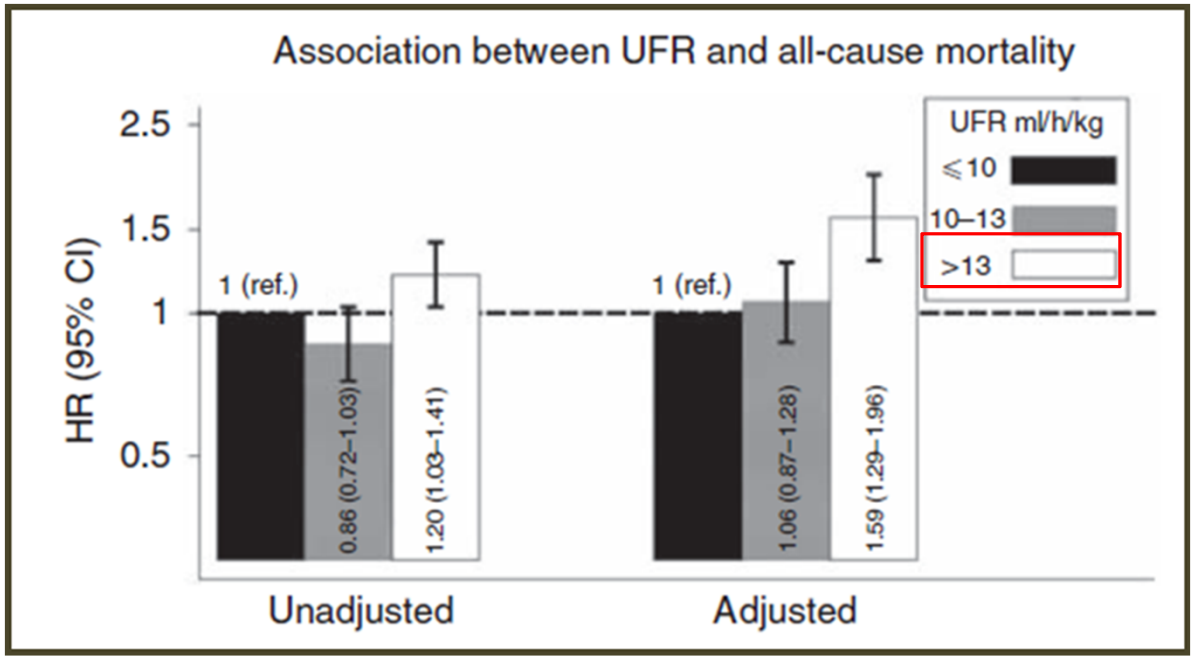
ONLINE FEEDBACK ABOUT UF RATE





Source: fmcna-hd.com

HIGH UF RATE (>13ML/KG/HR) AND INCREASED DEATH IN HEMO STUDY

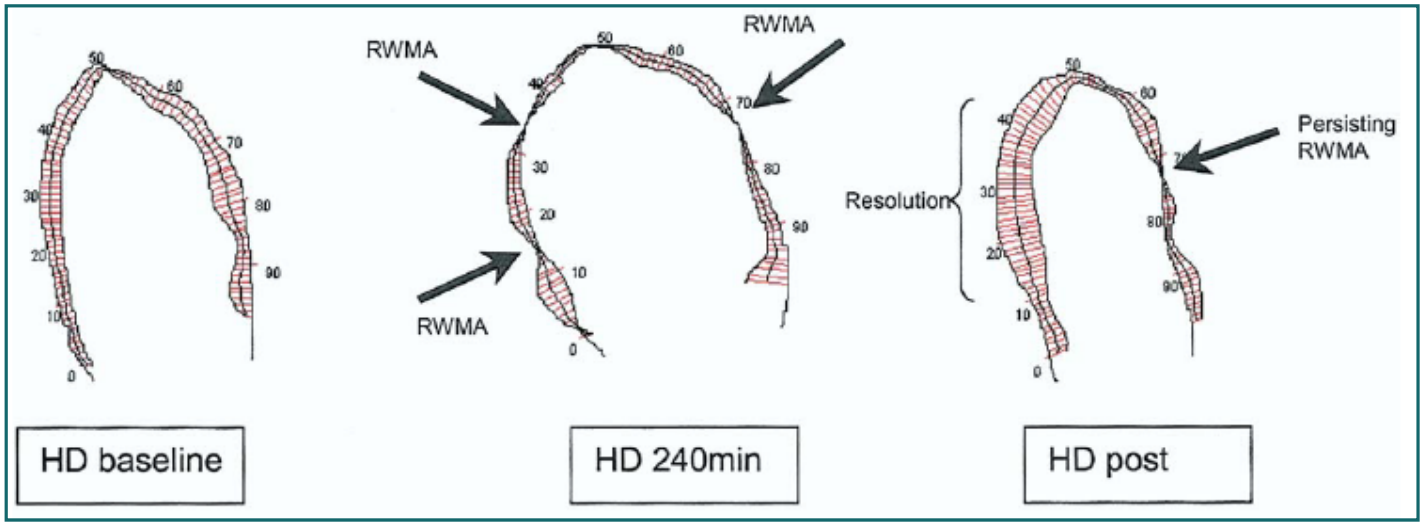


HR for all cause death
1.59 (95% CI 1.29-1.96)

HR for CV mortality
1.71 (95% CI 1.23-2.38)

Flythe J, Kidney Int 2011

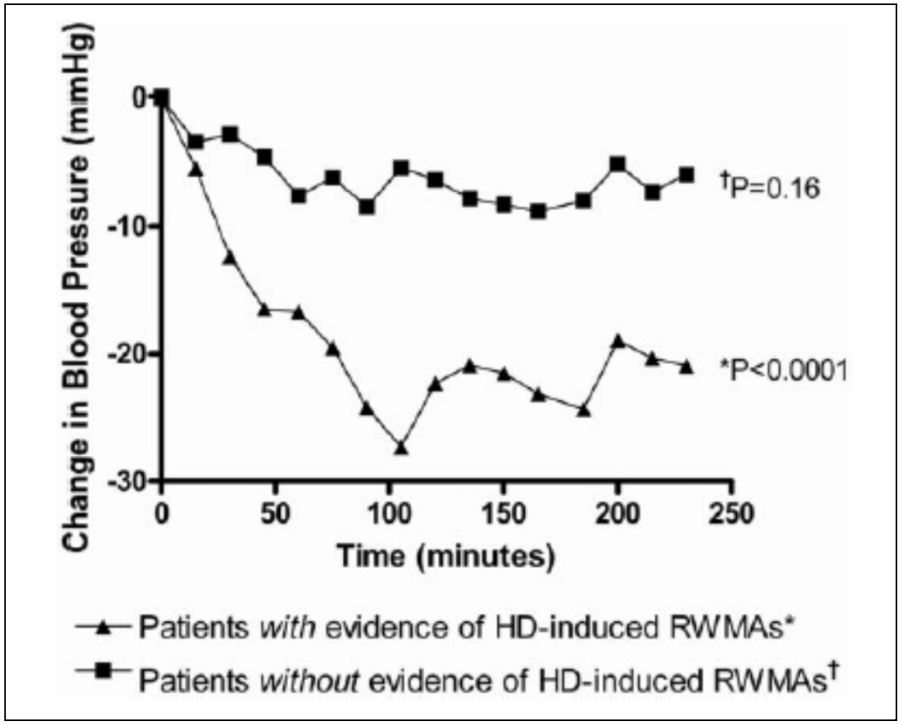
MYOCARDIAL STUNNING DURING HD

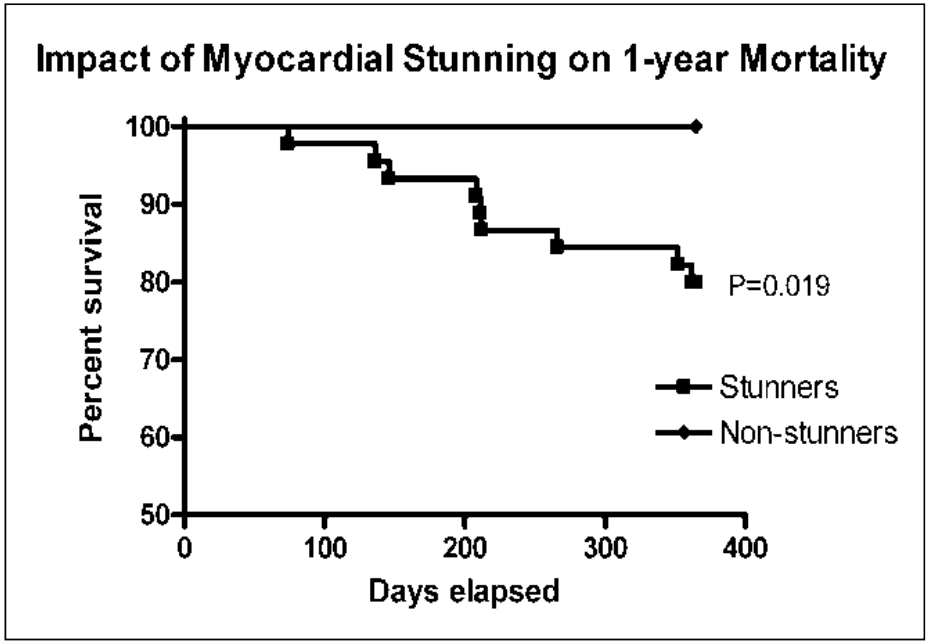


Wall motion abnormalities seen during intradialytic ECHO

Selby N, Camici P, McIntyre C. AJKD 2006

MYOCARDIAL STUNNING AND MORTALITY





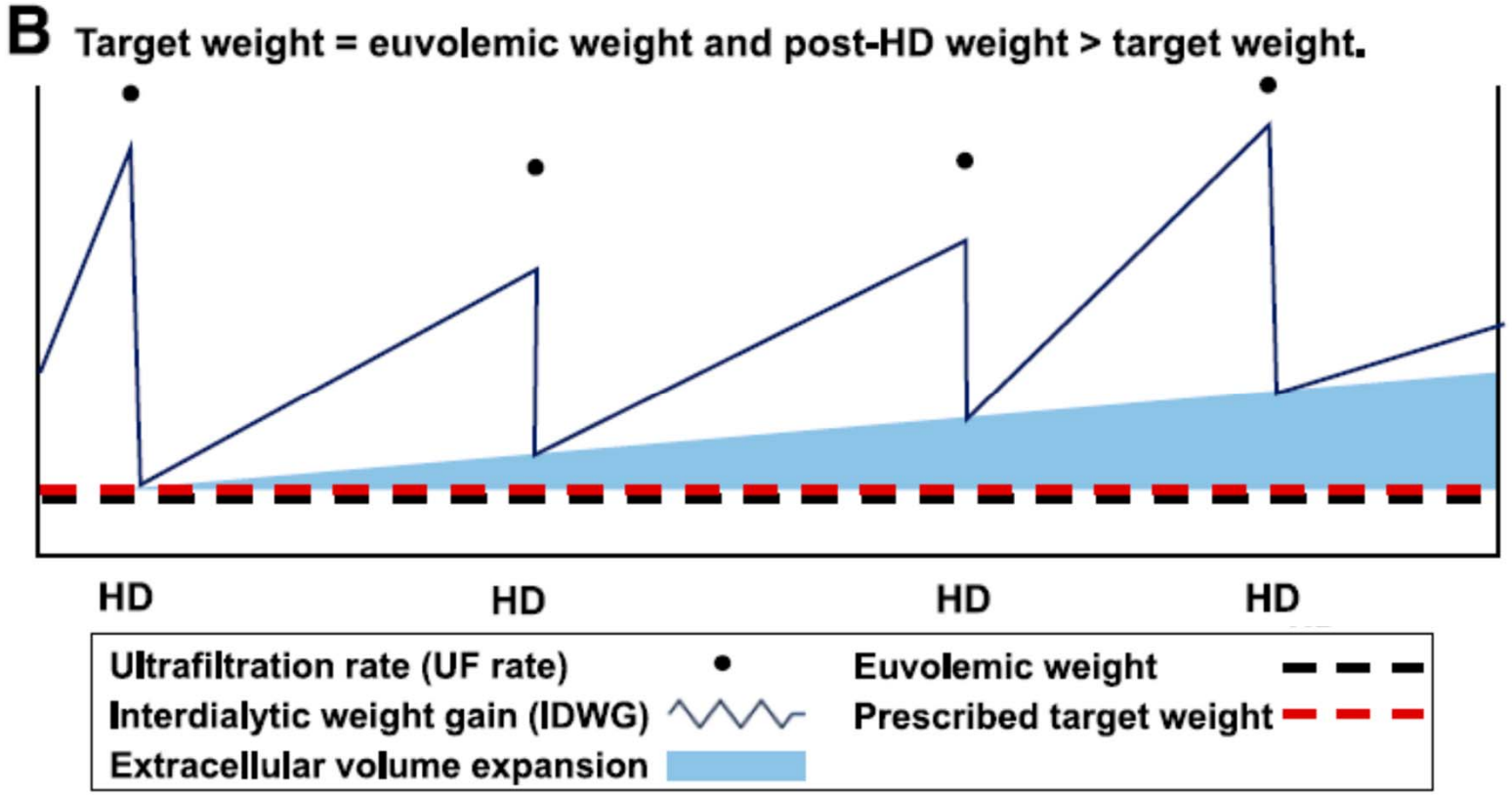
Burton JO, McIntyre C. CJASN 2009

HIGHER UF VOLUMES ASSOCIATED WITH MYOCARDIAL STUNNING

Factor associated with presence of myocardial stunning	Odds Ratio
UF volume during HD of 1L	5.1
UF volume during HD of 1.5L	11.6
UF volume during HD of 2L	26.2
Maximum SBP reduction during HD of 10 mmHg	1.8
Maximum SBP reduction during HD of 20 mmHg	3.3
Maximum SBP reduction during HD of 30 mmHg	6.0

Burton JO, McIntyre C. CJASN 2009

HOW MUCH DO YOU WANT OFF TODAY?



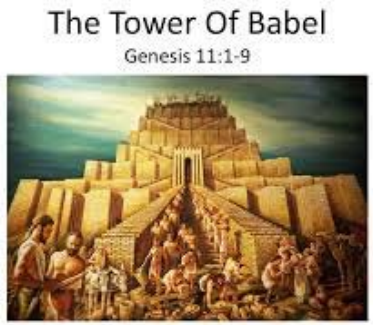
NephSAP ESRD and Dialysis, Nov 2016

WORKING DEFINITION OF TARGET WEIGHT

Reasonable blood pressure control with minimum number and doses of meds

No obvious evidence of fluid overload (shortness of breath, crackles, edema)

Patient feels subjectively fine during and after HD sessions (not washed out, cramping or passing out)



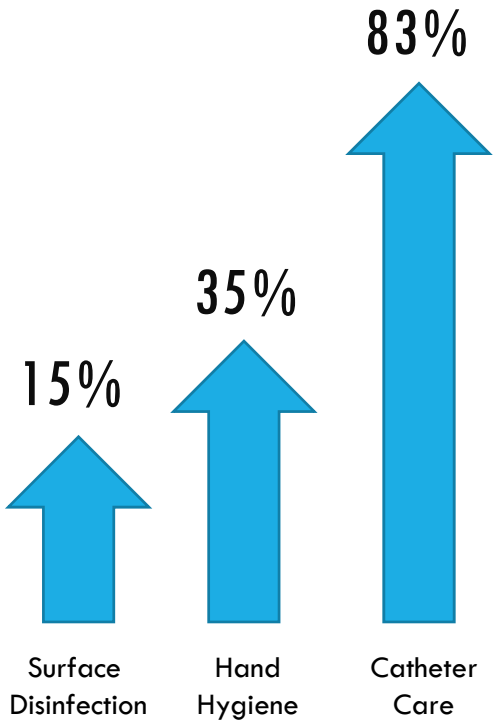

CDC
Patient Safety
CLEAN HANDS SAVE LIVES
Protect patients, protect yourself
Candida
Staphylococcus
Influenza
RSV
Klebsiella
Pseudomonas
Enterococcus
Alcohol-rub or wash
before and after EVERY contact.
hand
hygiene
saves lives
www.cdc.gov/ handhygiene

U.S. DIALYSIS FACILITIES DO NOT FOLLOW BASIC INFECTION CONTROL

- Standard Surveys - 1928 surveys/6414 Active Providers

#	V-Tag	Tag Description	# Citations	% Surveys Cited
1	V113	IC-Wear Gloves/Hand Hygiene	648	33.6%
2	V122	IC-Clean, disinfect surfaces & equipment/written protocols	581	30.1%
3	V543	POC-Manage volume status	323	16.8%
4	V403	PE-Equipment maintenance- manufacturer's DFU	307	15.9%
5	V147	IC-Staff education re catheters/catheter care	269	14.0%

The number of citations is increasing each year



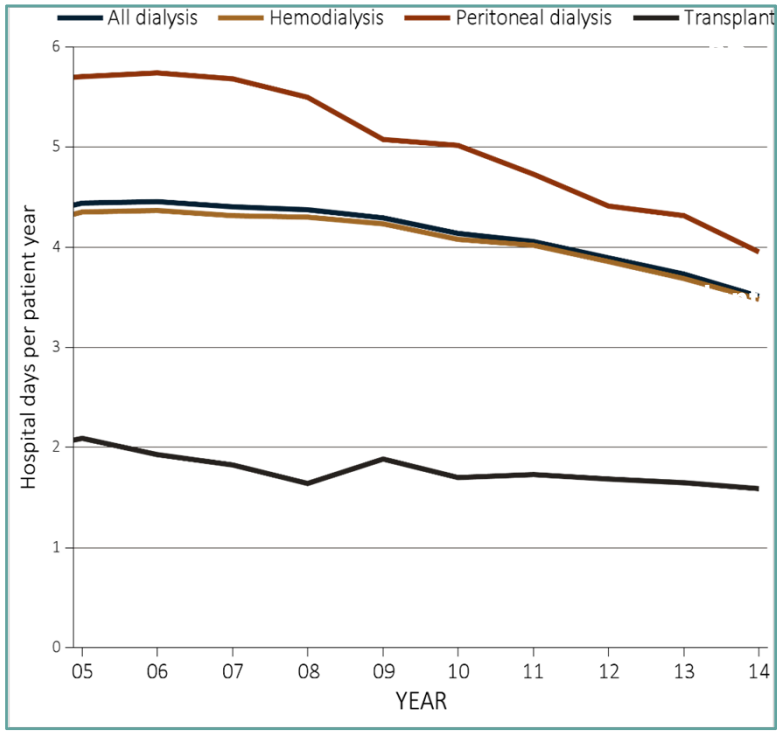
INFECTIONS - 2ND LEADING CAUSE OF DEATH

	Cause-specific mortality			
	CVD	**Infection**	**Other cause**	**Missing cause**
Modality				
ESRD	39%	9%	26%	26%
Dialysis	41%	9%	27%	23%
Transplant	11%	6%	16%	68%

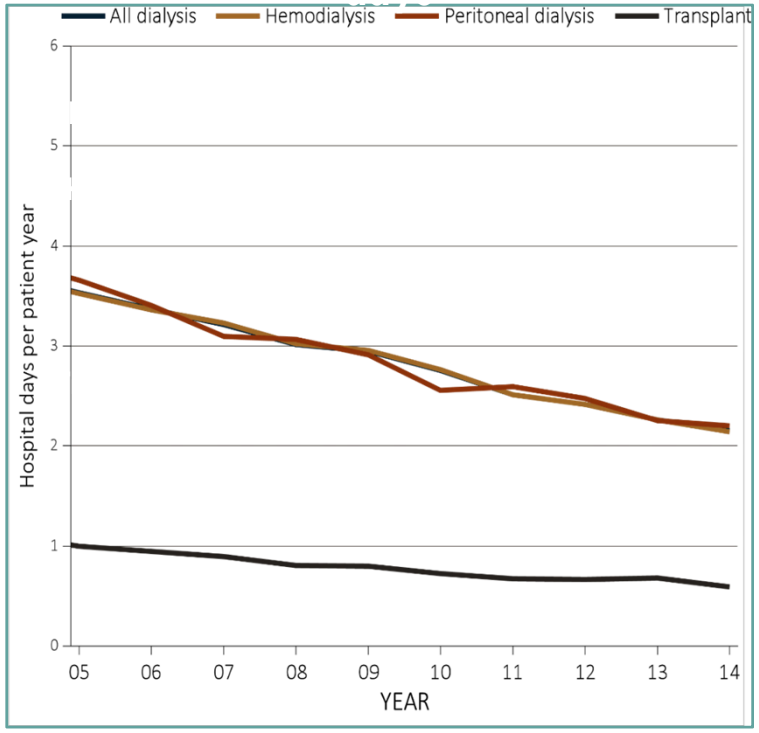
Vol 2, ESRD, ChTable 6.2 Unadjusted percentages of deaths due to cardiovascular disease (CVD), infection, other specified causes, and with missing data, by modality among ESRD patients, 2012

MORE HOSPITAL DAYS FOR INFECTION THAN FOR CVD

Infection hospital days



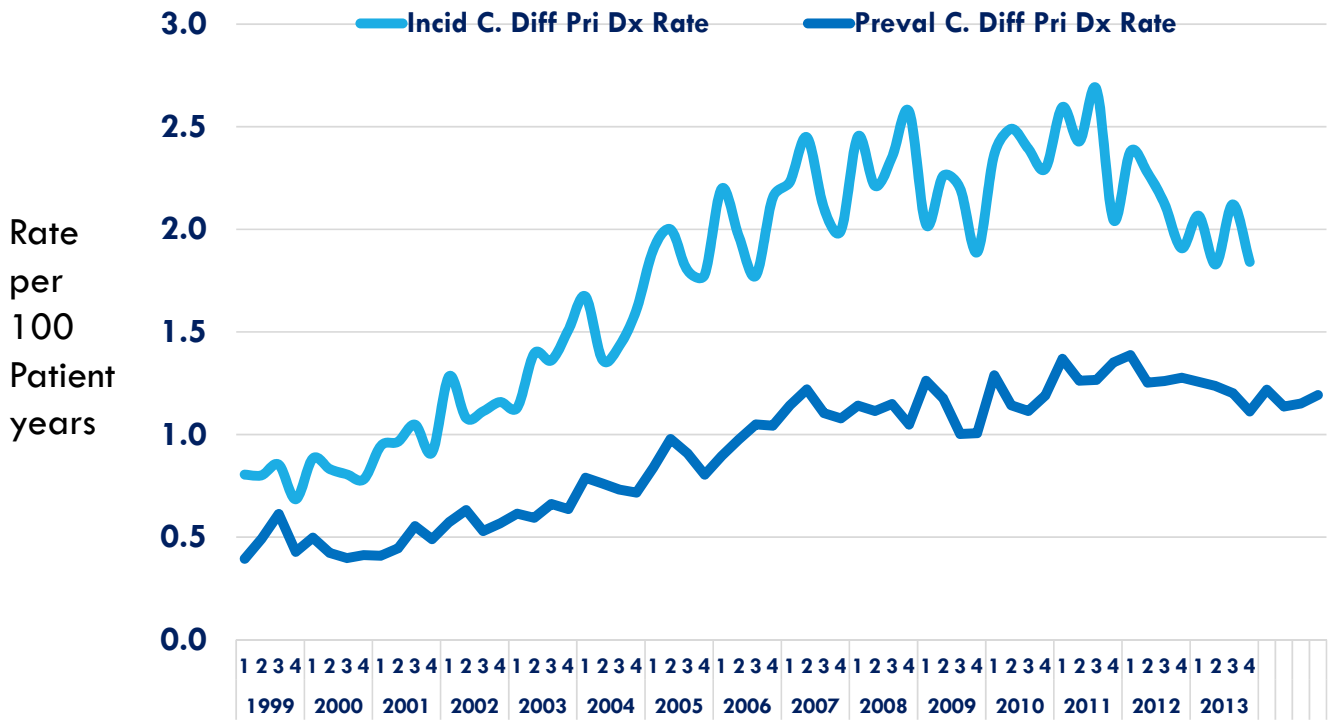
CVD hospital days



2016 Annual Data Report, Vol 2, ESRD, Ch 5

Slide Courtesy of Alan Kliger, MD, Nephrologists Transforming Dialysis Safety

C. DIFF IS EXPLODING IN ESRD PATIENTS



Slide Courtesy of Alan Kliger, MD, Nephrologists Transforming Dialysis Safety

HIGH RELIABILITY = CULTURE OF SAFETY

"Collective mindfulness"

Communication based on mutual trust

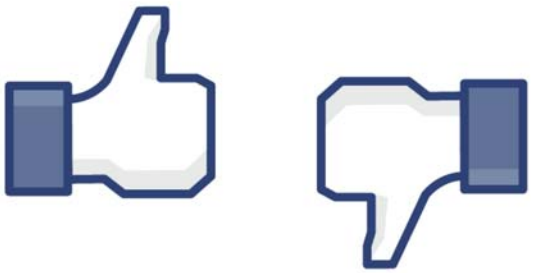
Shared perception about importance of safety

Confidence in preventive measures

Shared commitment to end preventable infections and harm

Kliger AS. CJASN 2015
AHRQ Website

“The way we do things around here”



WHAT DO DOCTORS SAY ABOUT DIALYSIS UNITS?

"Nobody follows hand hygiene consistently."

"Dialysis staff have a "not my job" attitude."

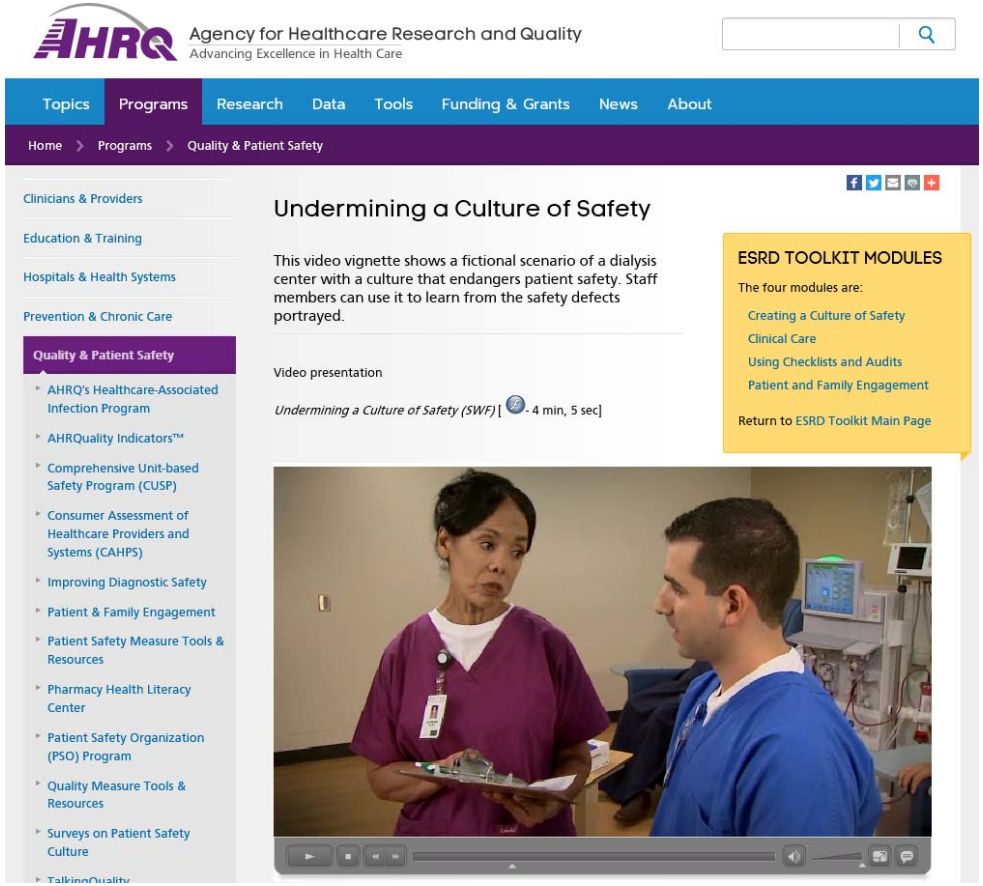
"Leadership for infection control is lacking."

"The nurse manager should be in charge."

"Everyone needs to be more engaged and empowered."

NTDS Focus Groups ASN Kidney Week 2016

THREATS THAT INFLUENCE FACILITY CULTURE



Patient demands

Efficiency focus

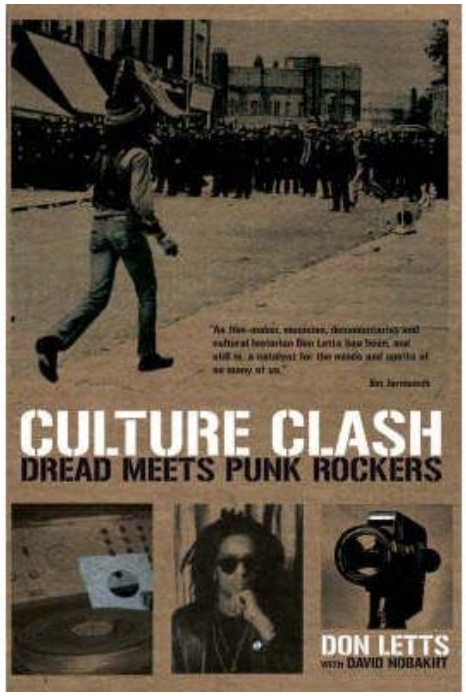
Time constraints

Mixed messages

Peer interactions

Undermining a Culture of Safety. Content last reviewed December 2014. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/underminingsafetyvid.html

WHY CULTURE IS SO POWERFUL



You are not talking about company "values"

Culture represents imbedded behaviors and beliefs (right or wrong)

Challenging culture provokes unconscious reactions & resistance

Schein E, Organizational Culture and Leadership, 2017

RESISTANCE TO CHANGE

Denial

- We don't have an infection control problem

Blaming or evading

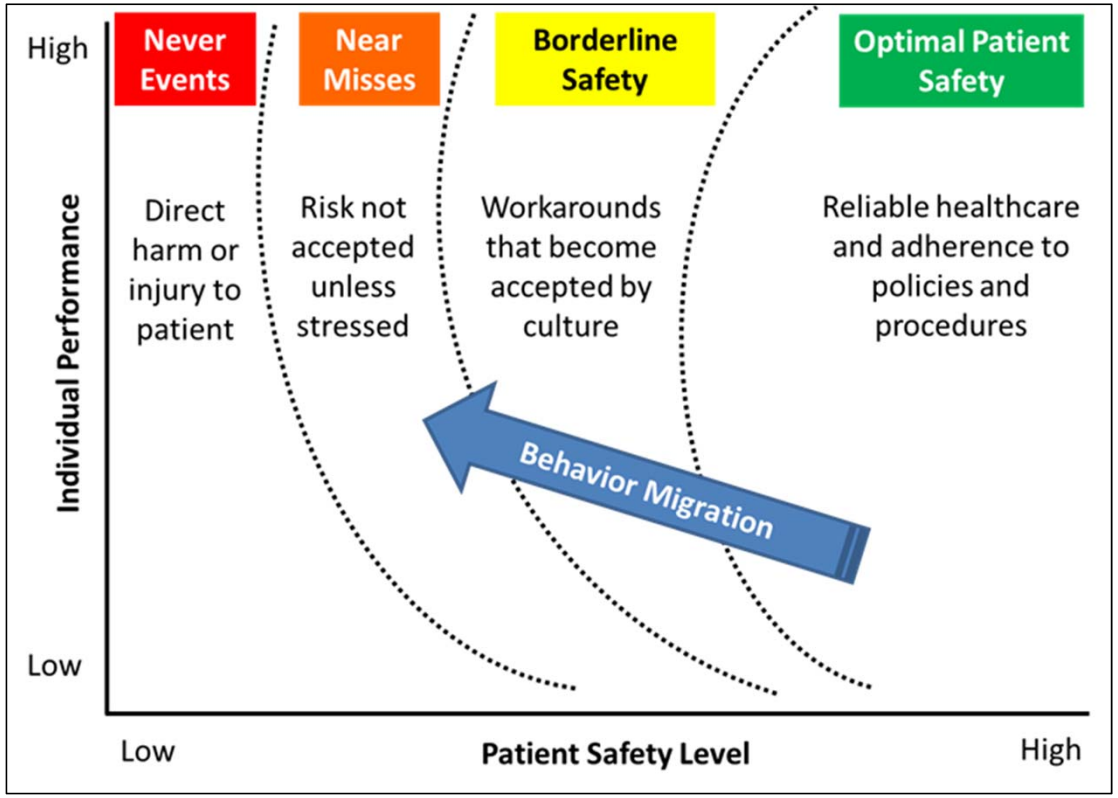
- Must be the hospital or the surgeon

Maneuvering and bargaining

- Why should I do all this? I'm here for the paycheck
- I'll do it…but you'll have to pay me extra

NTDS Webinar One, May 2017
Schein E, Organizational Culture and Leadership, 2017

WHY DIALYSIS STAFF BREACH POLICIES



Many breaches are intentional violations

Natural responses to stress

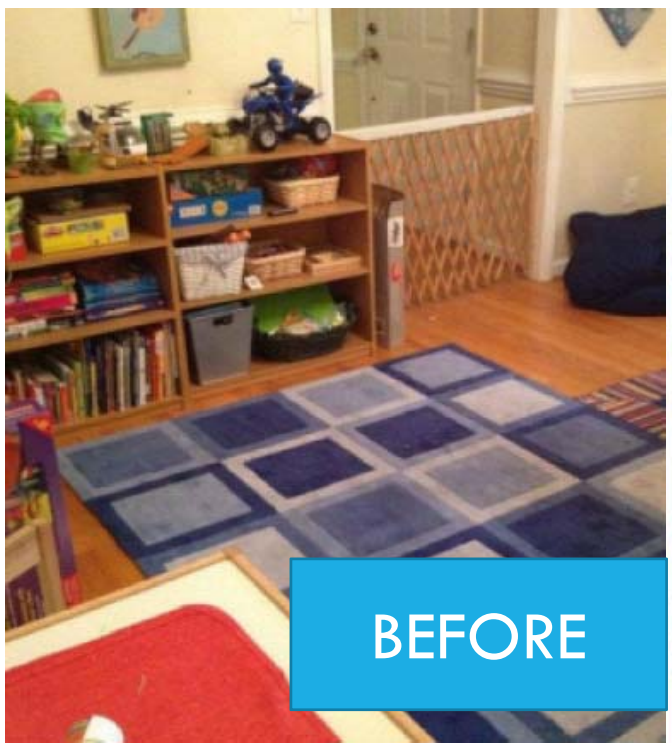
Shortcuts to improve performance

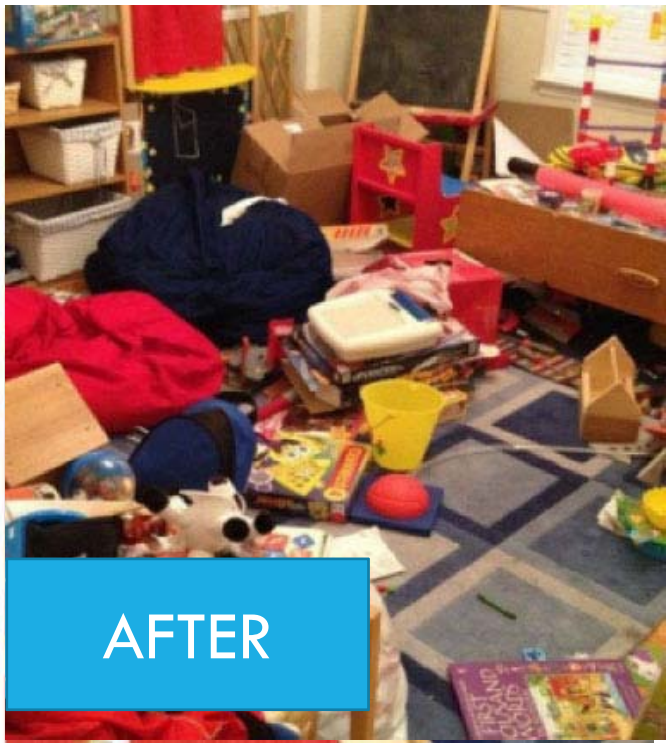
Absent of visible harm, acts become accepted

Behavior migrates

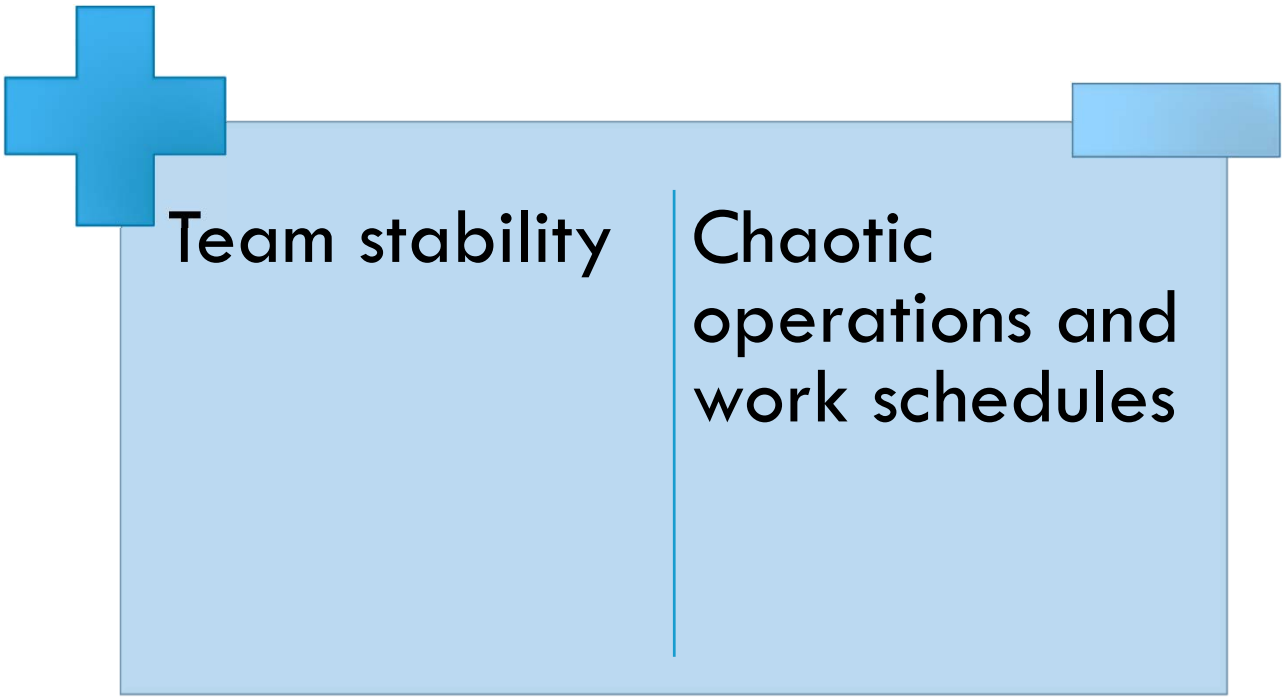
Adopted from Amalberti, R. Qual Saf Health Care 2006

WHAT REALLY HAPPENS IN DIALYSIS UNITS





HEALTHCARE PERFORMANCE IS IMPACTED BY ENVIRONMENT



Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

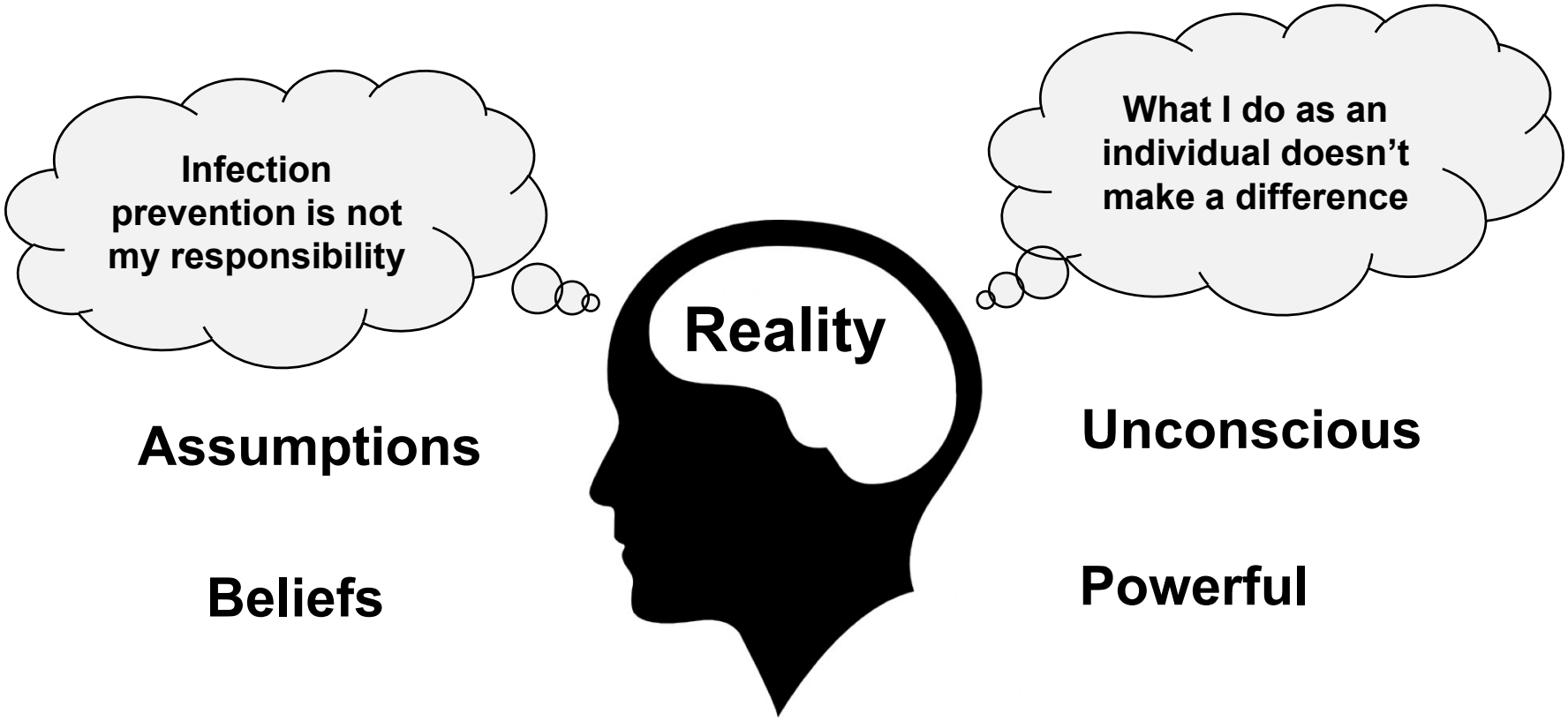
GO MAKE A TEAM!

Most doctors and dialysis staff will agree with spirit of the request

Most doctors and dialysis staff will struggle to make it happen

Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

MENTAL MODELS DRIVE BEHAVIOR



Source: Senge P. The Fifth Discipline 2006

NARROW ROLES
NARROW MENTAL MODELS

Although roles (and in the case of ESRD, CMS) specify who is responsible for which tasks, there is one troubling shortcoming….

Each "role" in dialysis has the expertise needed to perform one part of healthcare delivery or operations

People often focus narrowly on their own responsibilities, neglecting the larger shared goal

This risk increases when their interdependent partners are difficult to identify (e.g. different shift of workers, different groups/hospitals, different companies)

Worse when accountability around the larger goal is ambiguous

Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

DIFFERENT PROFESSIONS HAVE DIFFERENT MENTAL MODELS

Technicians, nurses, doctors and management are all trained to think and communicate differently

They focus and value different dimensions of coordination

This complicates team dynamics and interactions

Even though roles and assignments are supposed to clarify, they rarely guarantee the right kind of teamwork

Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

BARRIERS TO EFFECTIVE TEAMWORK

Inconsistency in Membership

Lack of Time

Lack of Information Sharing

Toxic hierarchy

Defensiveness

Conventional Thinking

Complacency

Conflict

Lack of Follow up with Coworkers

Distractions

Fatigue

Workload

Misinterpretation of Cues

Lack of Role Clarity

Team STEPPS. Agency for Healthcare Research and Quality. Accessed at www.ahrq.gov

WHAT IS LEADERSHIP?

Holds a team together and models effective teamwork.

Ensures a plan is designed and implemented.

Manages and allocates resources effectively.

Provides feedback regarding assigned responsibilities and progress toward the goal.

Facilitates communication, conflict resolution, and information sharing.

Assists and encourages team members to assist one another.

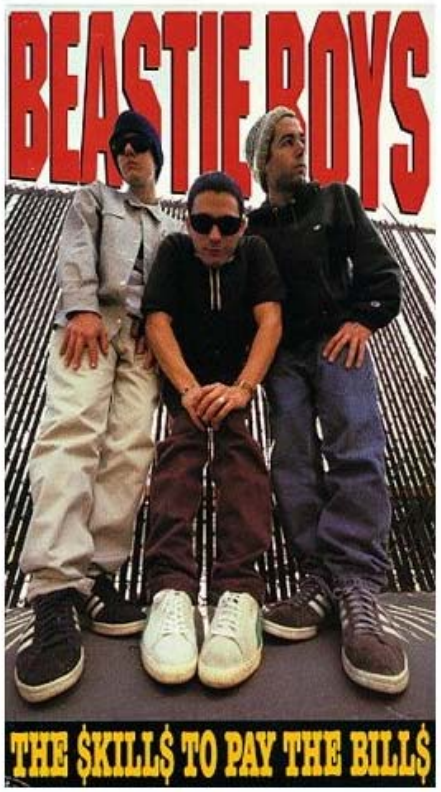
Nurtures an environment of mutual support.

Team STEPPS. Agency for Healthcare Research and Quality. Accessed at www.ahrq.gov

TYPES OF TEAM LEADERS

Designated—The person assigned to lead and organize a team, establish clear goals, and facilitate open communication and teamwork among team members.

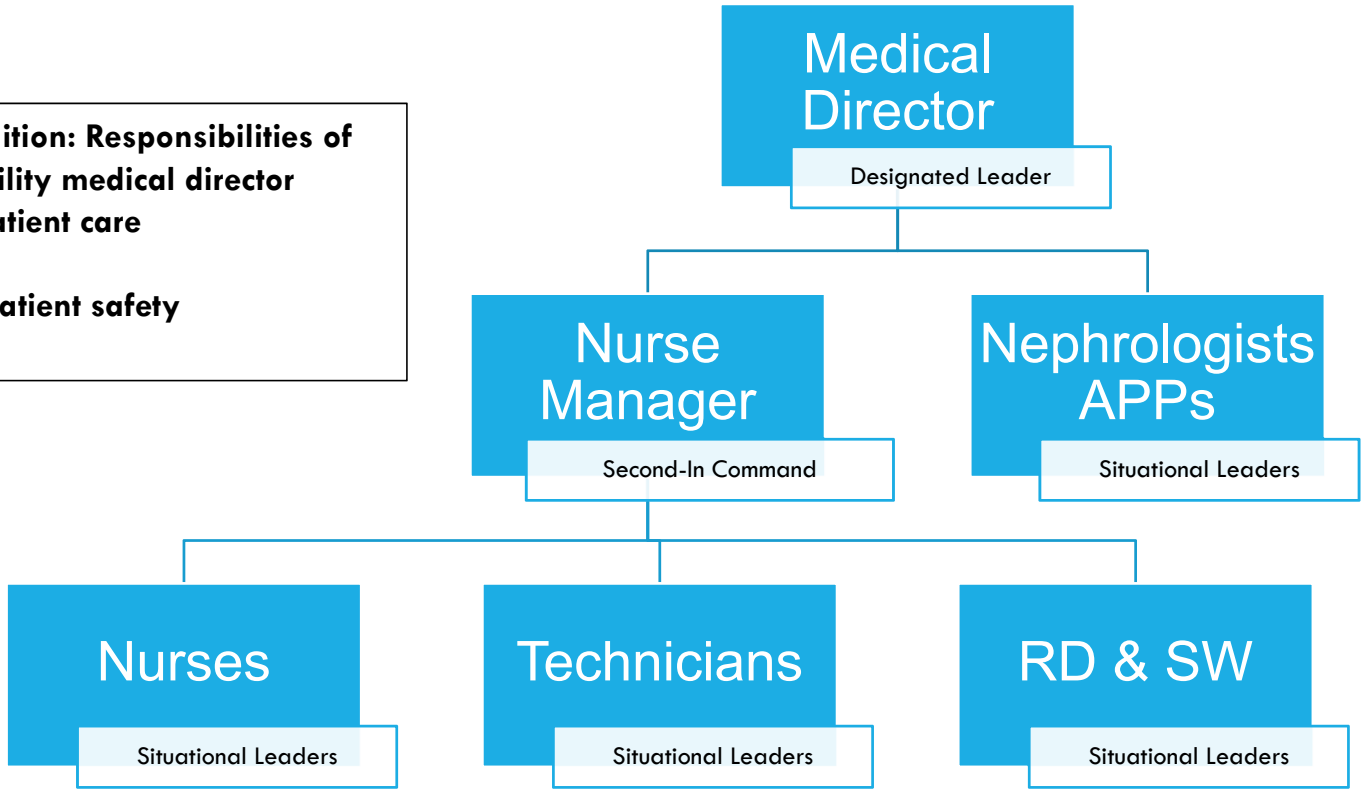
Situational—Any team member who has the skills to manage the situation at hand.



Team STEPPS. Agency for Healthcare Research and Quality. Accessed at www.ahrq.gov

LEADERSHIP IN THE FACILITY

§494.250 Condition: Responsibilities of the dialysis facility medical director
- Delivery of patient care
- Outcomes
- Quality and patient safety



SITUATIONAL LEADERSHIP IN ACTION

Front-line caregivers have to explain goals to each other

Nurses and technicians need to engage each other to work out details and overcome problems

Work has to be framed with a larger (higher) goal in mind

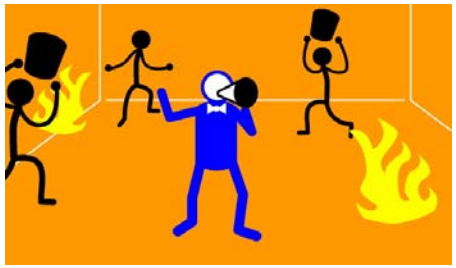
THE VISION OF A SAFETY CULTURE

Efforts require self-initiative by individuals

Hierarchy of authority must be respected and followed

Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

PREVENT FIRES INSTEAD OF FIGHTING THEM



Fast paced communication and coordination required in dialysis

Standardized approaches and structuring help, especially if care teams are constantly changing

Example: No posting of pod assignments

- Doctors don't know which technician or nurse is caring for which patients
- Technicians called from other pods to cover without any standardized sign out (miss important issues; can't pass along information to doctors)

Result: inefficient communication and lack of perceived accountability by dialysis staff

Valentine M. Improving on-the fly teamwork in healthcare. HBR Dec 2016

KEY CONSIDERATIONS FOR MEDICAL DIRECTORS

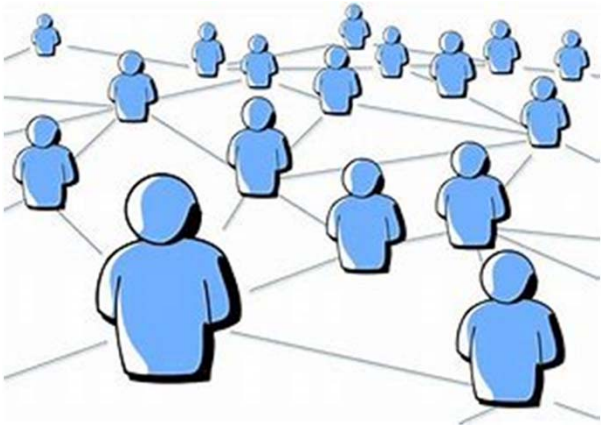
Most staff can do their jobs better than the doctor can

Medical directors have an obligation to enable staff to do better tomorrow than today

Leaders should manage staff interactions (not just actions)

Without support of staff, no medical director can lead effectively

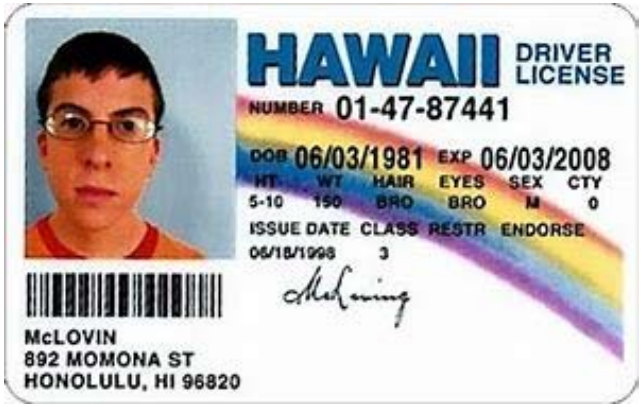
Medical directors must advocate for staff interests



Ackoff R. Systemic Practice and Action Research 1998

HUMAN FACTORS AND PATIENT SAFETY

HOW IMPORTANT ARE ROLE MODELS?



VALUE OF ONE-ON-ONE TEACHING

Even a little bit of high-quality, one-on-one time is valuable

Informal, on the job teaching can be more effective than the classroom

- More relevant
- Better timed
- More personalized

Builds loyalty, which leads to superior performance

Finkelstein S. The Best Leaders are Great Teachers. HBR Jan-Feb 2018

WHAT DOCTORS NEED FROM DIALYSIS STAFF

Situational Leadership

Team-Focused Mental Models

Adaptability

Performance Orientation

Mutual Trust

Personal Commitment to Patient Safety!

Team STEPPS. Agency for Healthcare Research and Quality. Accessed at www.ahrq.gov

PERSONAL GROWTH AND DEVELOPMENT

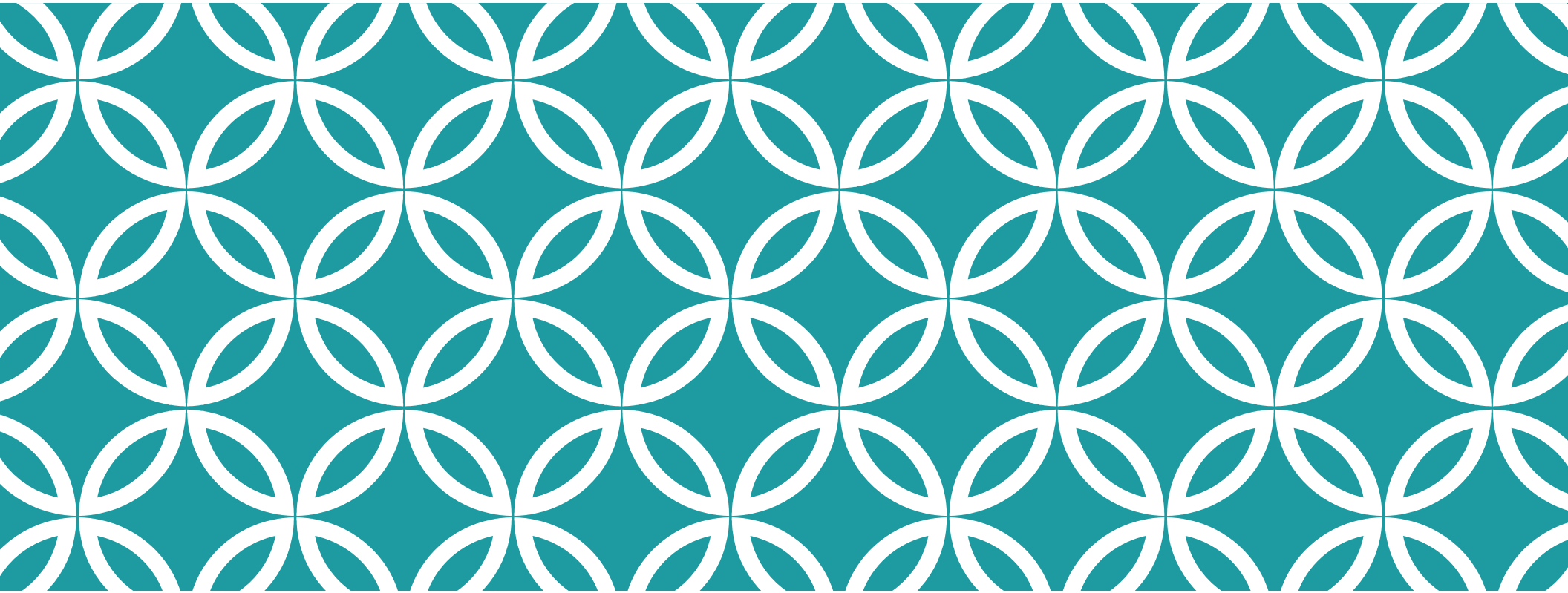
Efficiency is doing things right

Effectiveness is doing the right things

Wisdom is a product of effectiveness

Wisdom prevents us from sacrificing the future for the present

Ackoff R. Systemic Practice and Action Research 1998



THANK YOU! YOU MAKE A DIFFERENCE FOR OUR PATIENTS