

# Is Improvement Passé?

Donald M. Berwick, MD, MPP  
President Emeritus and Senior Fellow, IHI

# Two Cases

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Case 1: 65 Year Old Man, with Diabetes, Chronic Lymphoblastic Leukemia, Incipient Renal Failure, Spinal Cord Injury with Decreased Mobility, Pulmonary Embolism.

Chief Complaint: Worried about abnormal, worsening blood test.

What Matters to Him: "Answer my question, please."

Case 2: Fever. Continually, slowly worsening. Difficulty coordinating important tasks. Often thirsty, hungry, and worried about security. Some difficulty breathing. Sense of impending doom. Quite well for 4.5 billion years, but recently in deep trouble.

Chief Complaint: Threat to Existence of Life.

What Matters to Him: Greenhouse Gas Emissions.



# The Foundations of IHI

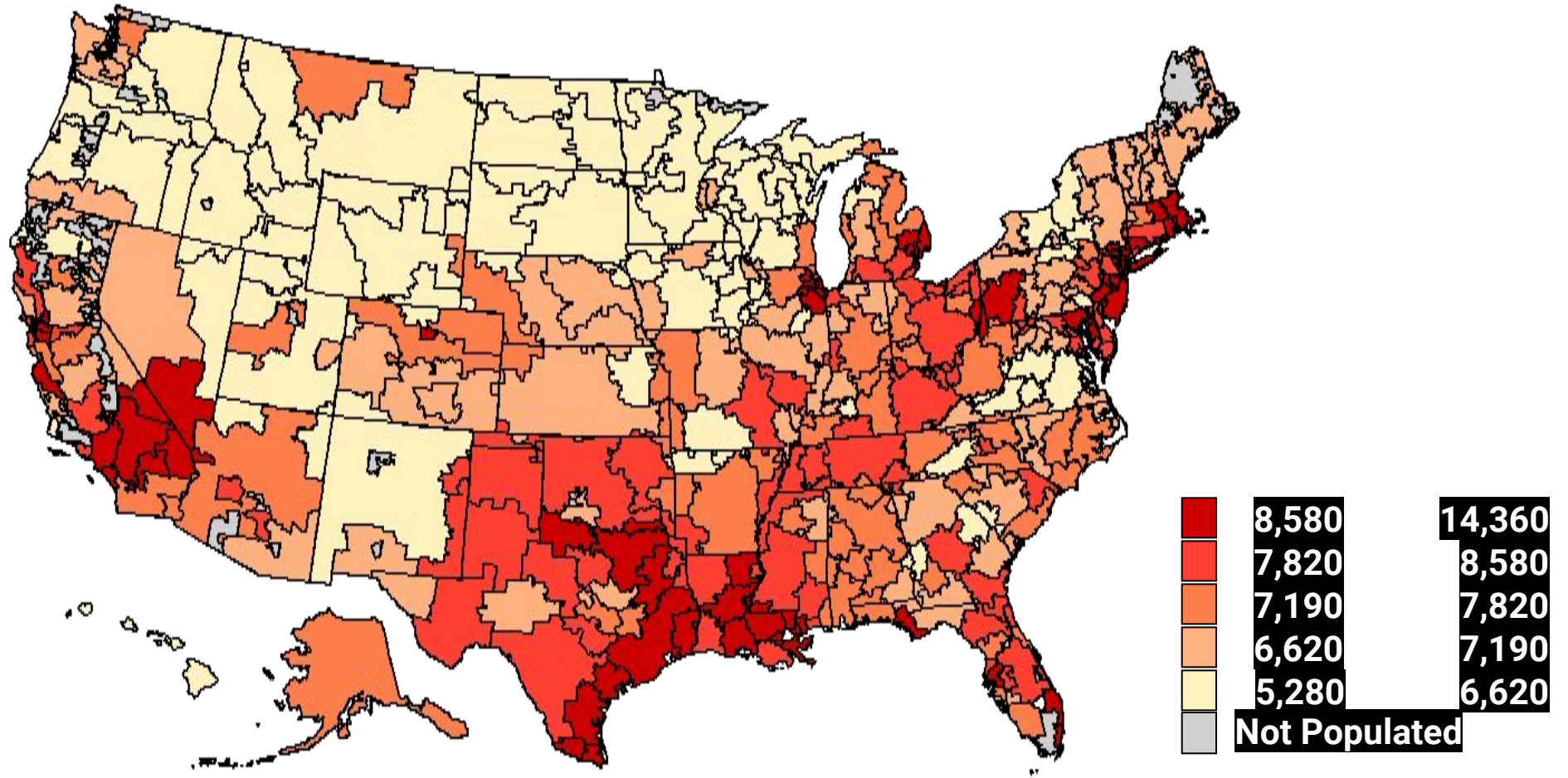
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- Aims
- Methods

Methods Matter



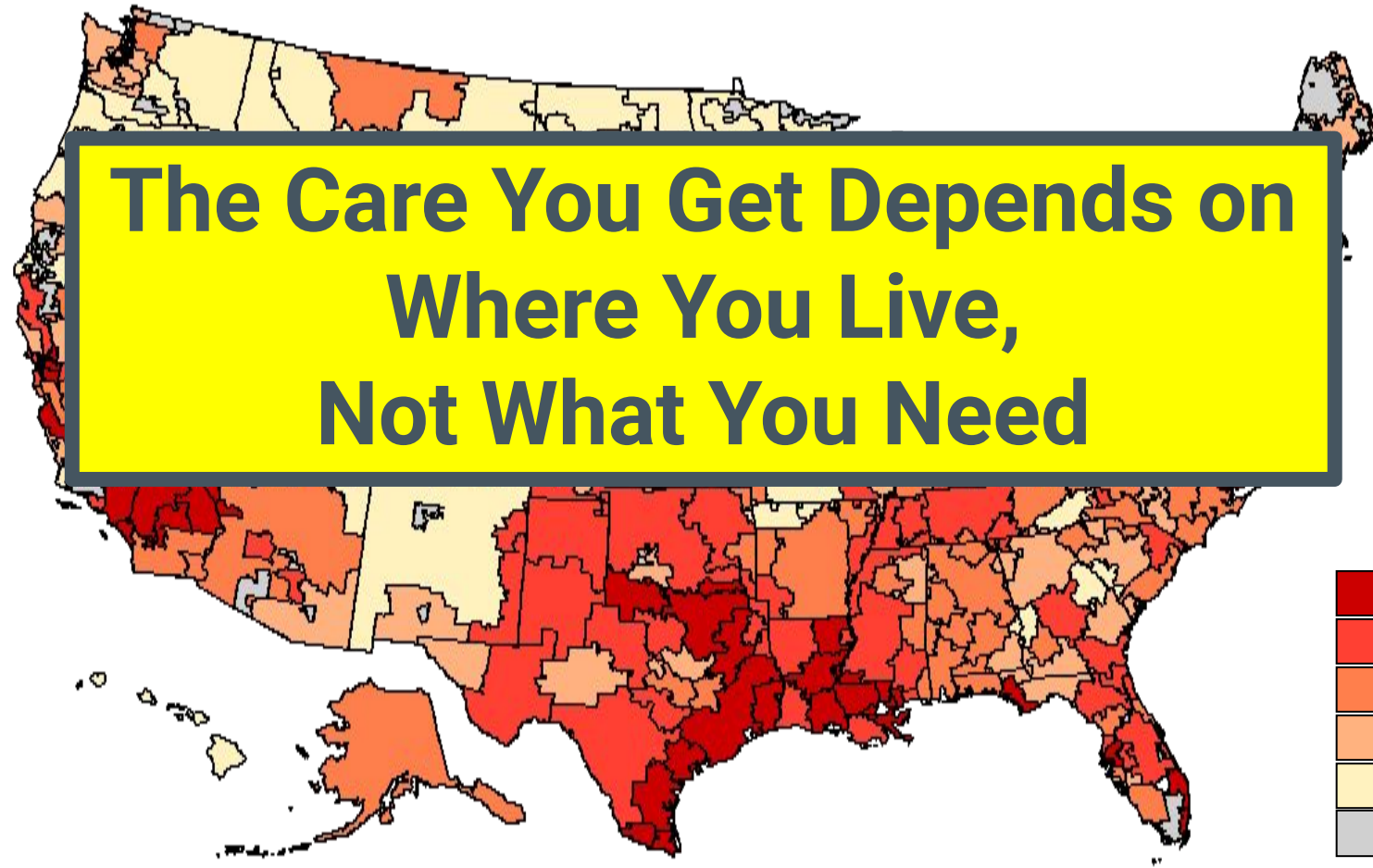
# Variations in Spending Across Regions (Elliott Fisher and Jack Wennberg)





# Variations in Spending Across Regions (Elliott Fisher and Jack Wennberg)

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## THE INVERSE CARE LAW

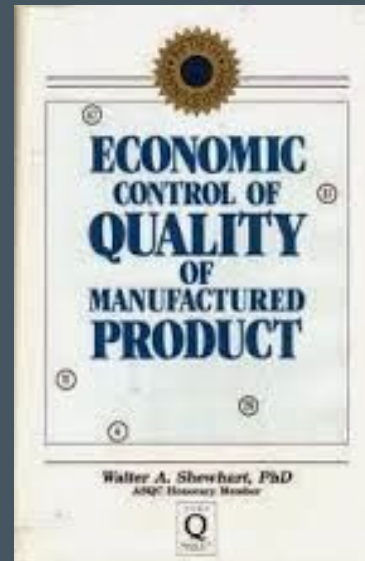
JULIAN TUDOR HART

*Glyncorrwg Health Centre, Port Talbot, Glamorgan, Wales*

**Summary** The availability of good medical care tends to vary inversely with the need for it in the population served. This inverse care law operates more completely where medical care is most exposed to market forces, and less so where such exposure is reduced. The market distribution of medical care is a primitive and historically outdated social form, and any return to it would further exaggerate the maldistribution of medical resources.



# Walter A. Shewhart (1891-1967)

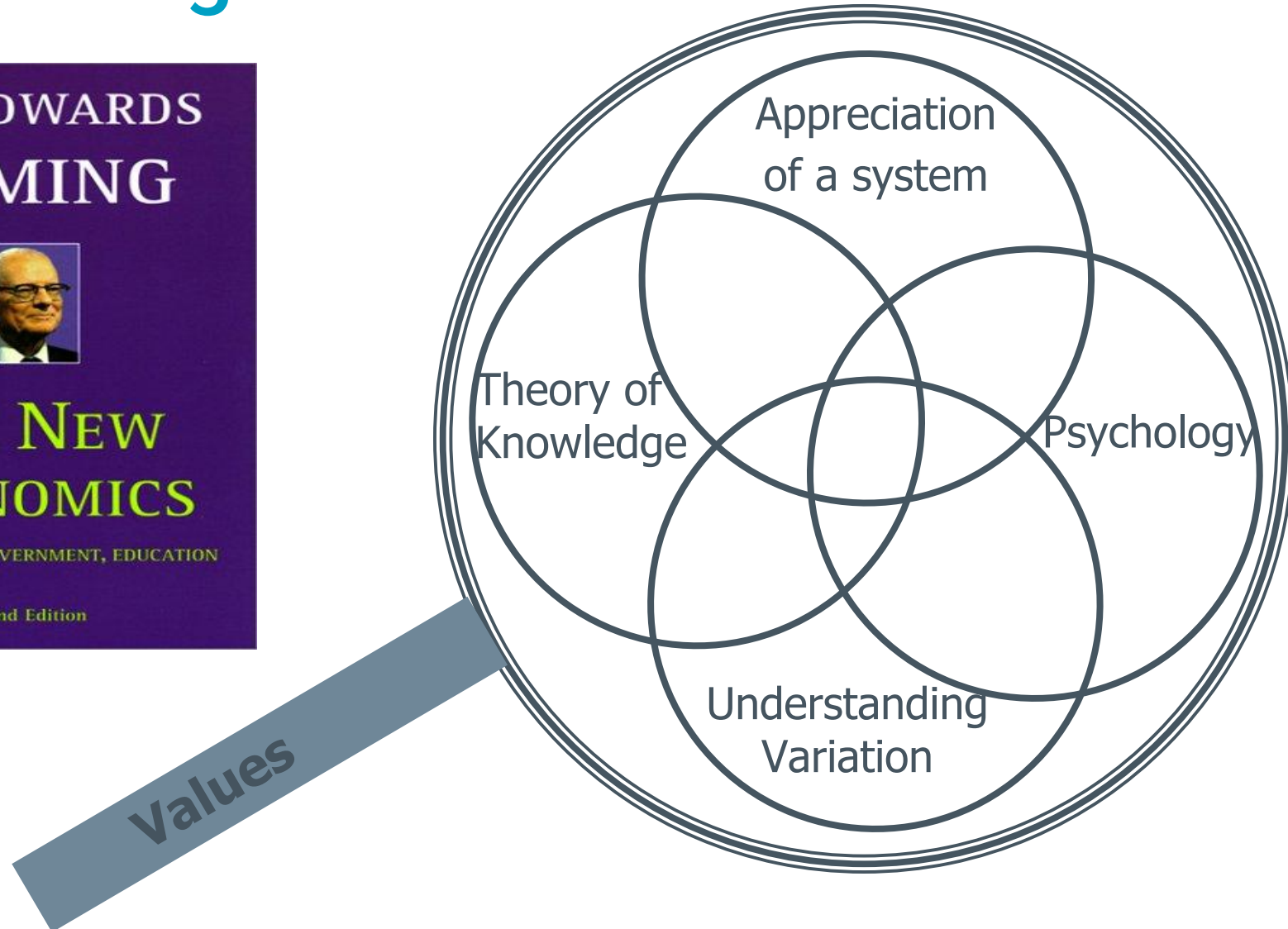
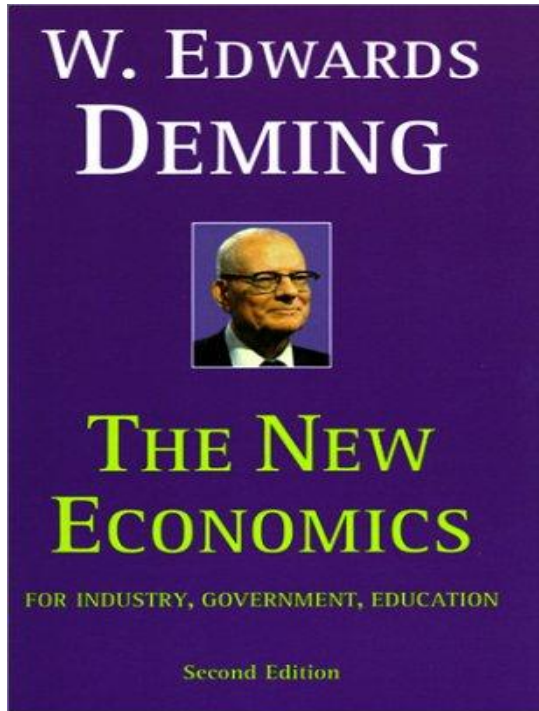


1931

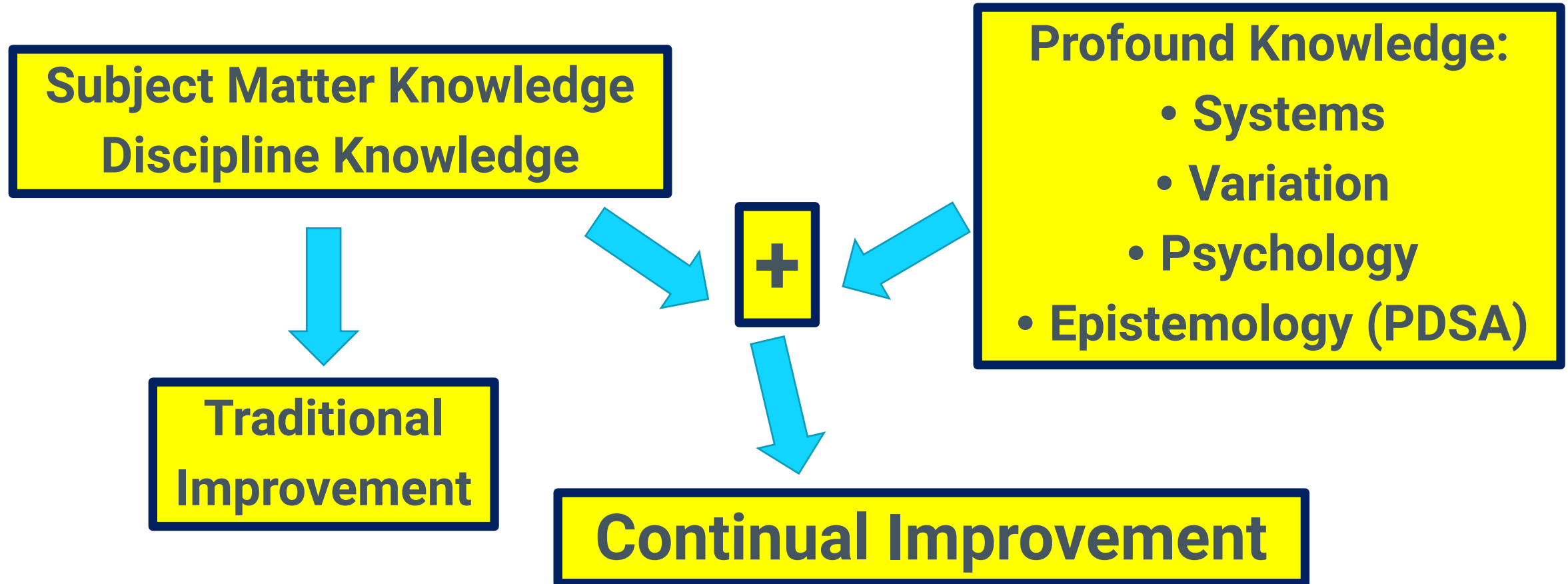


1939

# Deming's System of Profound Knowledge



# Traditional Improvement vs Continual Improvement



# Categories of “Profound Knowledge” (with Examples)

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- Knowledge of a System
  - Non-linear Dynamics
  - Flow and Interdependency
- Knowledge of Variation
  - Measurement
  - Enumerative and Analytic Statistics
  - Common Cause and Special Cause
- Knowledge of Psychology
  - Group Processes, Conflict, and Cooperation
  - Adult Learning and Creativity
  - Theory of Motivation
- Theory of Knowledge
  - Plan-Do-Study-Act



# “The Science of Improvement”

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- Systems Thinking
- Understanding Variation
- Psychology
- PDSA
- The API Model for Improvement



# The Model for Improvement

When you  
combine  
the 3  
questions  
with the...

What are we trying to  
Accomplish?

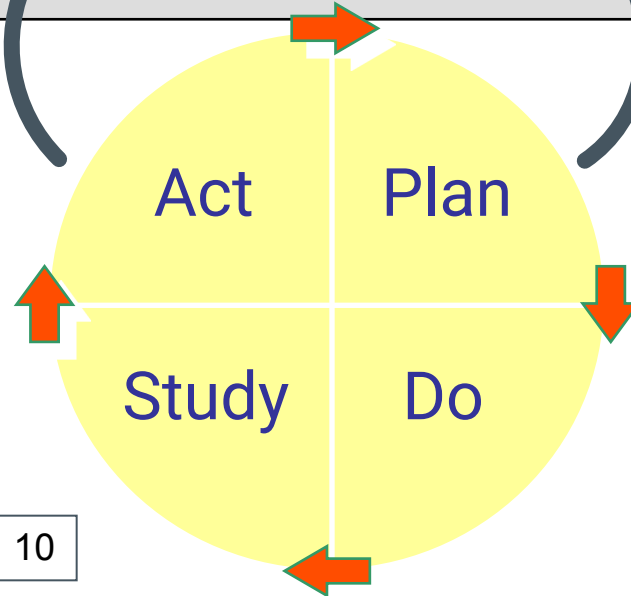
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How will we know that a  
change is an improvement?

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What change can we make  
that will result in  
improvement?

PDSA cycle,  
you get...



...the Model  
for  
Improvement.

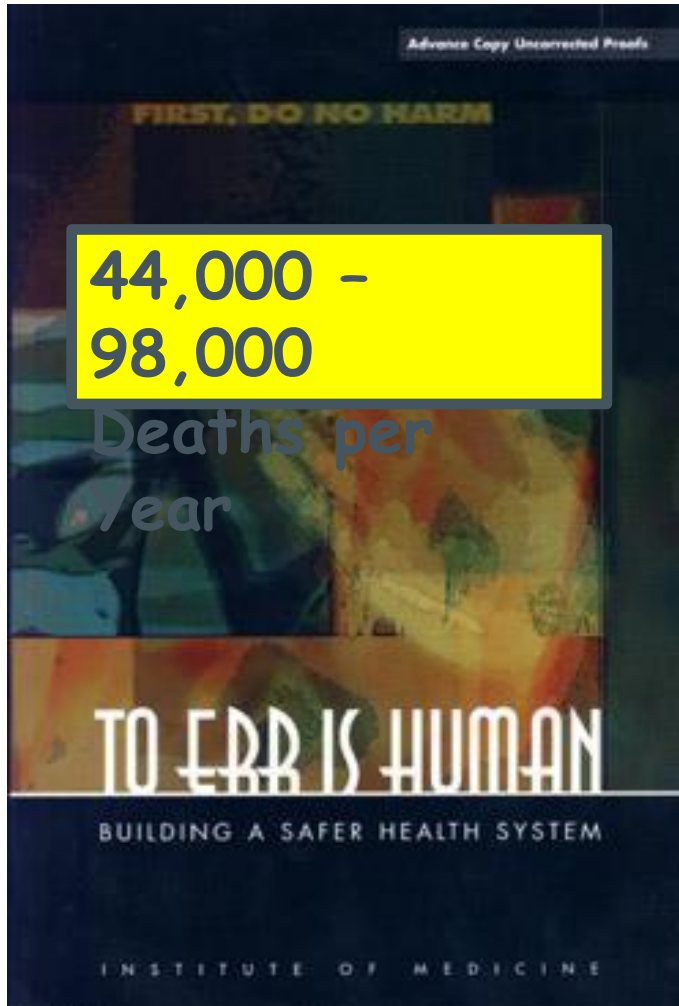
A Model  
for Learning and  
Change

Source: *The Improvement Guide* p. 10





# Institute of Medicine – 1999 & 2001



## 6 AIMS FOR IMPROVEMENT

- Safety
- Effectiveness
- Patient-Centeredness
- Timeliness
- Efficiency
- Equity



# Preoccupations in 2022

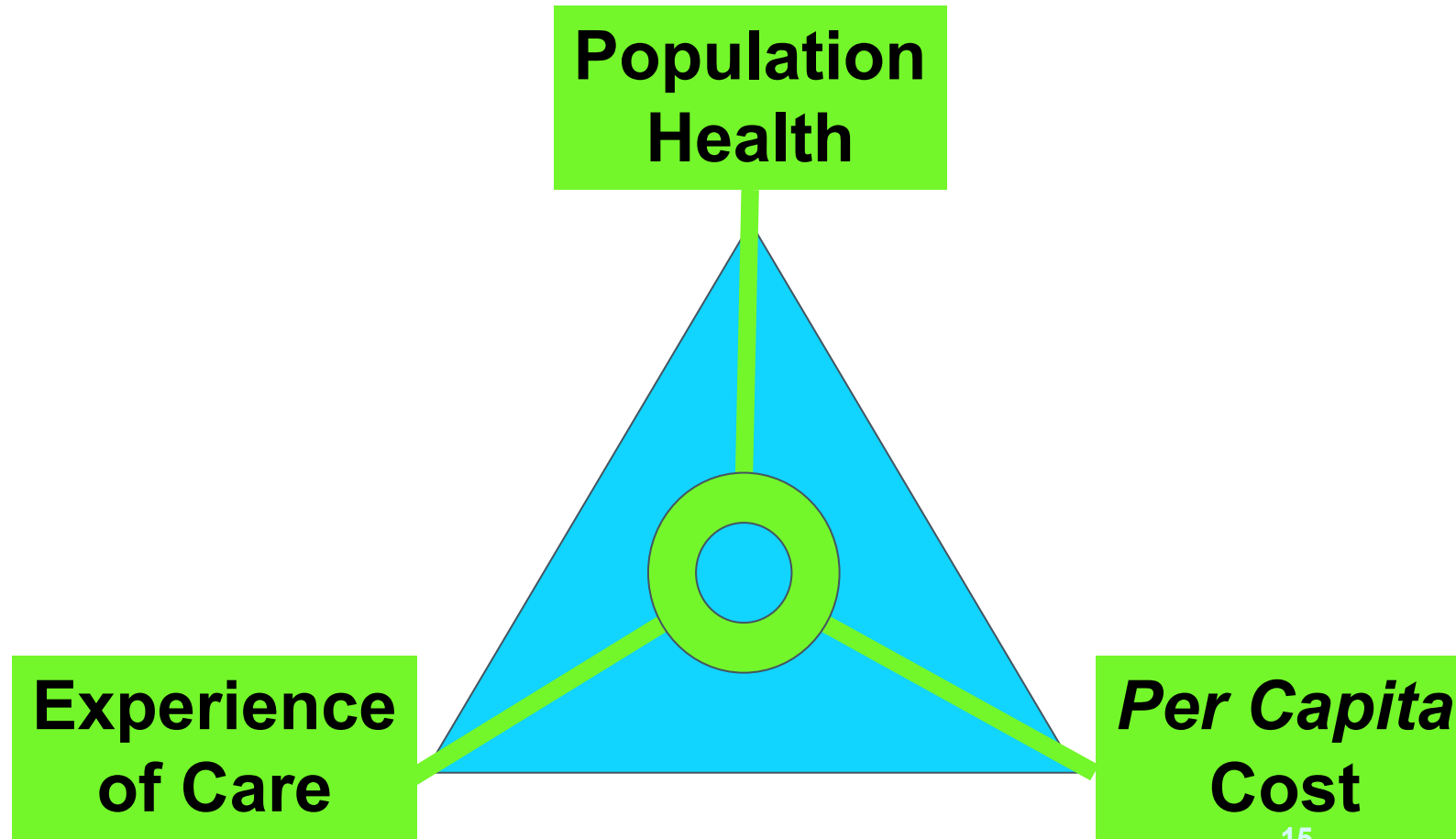
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1. Equity
2. Climate Change
3. Pandemic Preparedness
4. Workforce Burnout
5. Social Determinants of Health

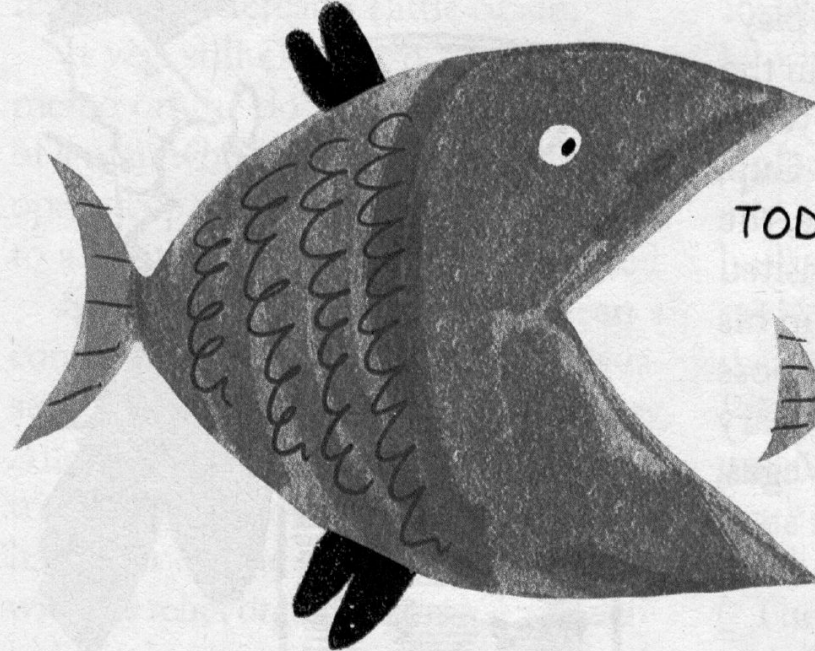


# The Triple Aim

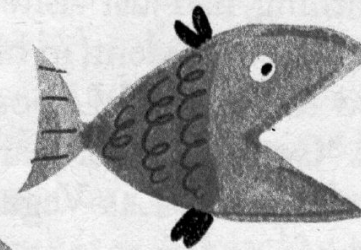
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TOMORROW'S PROBLEM



TODAY'S PROBLEM



YESTERDAY'S  
PROBLEM



VITI

# Is Improvement Passé? Or Can It Help Now?

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Can the scientific methods of quality improvement help achieve gains in this new terrain – climate change, equity, a sustainable workforce, pandemic preparedness, and social determinants of health?



# My Premise

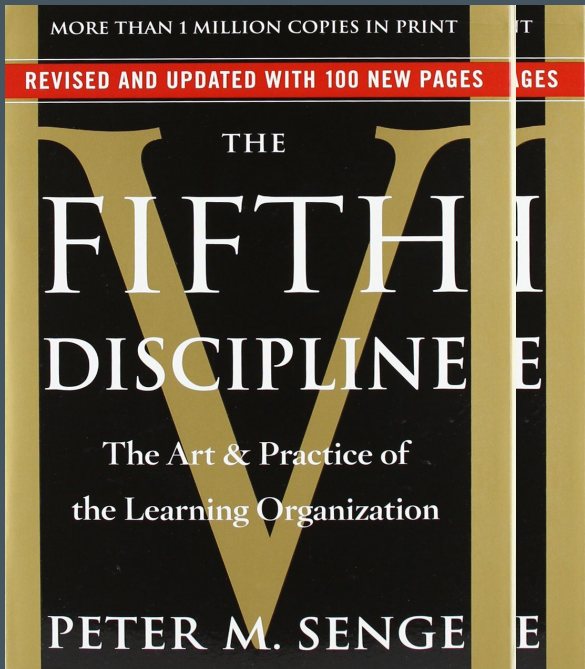
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We need to bring disciplined improvement science to the new social demands.

(Even to the injustices that anger us.)

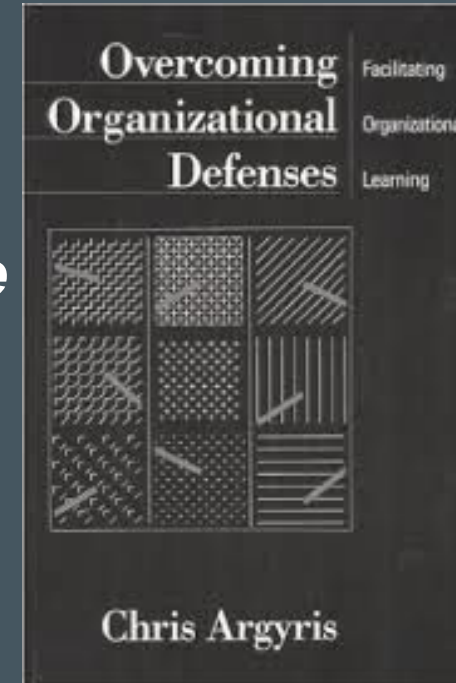
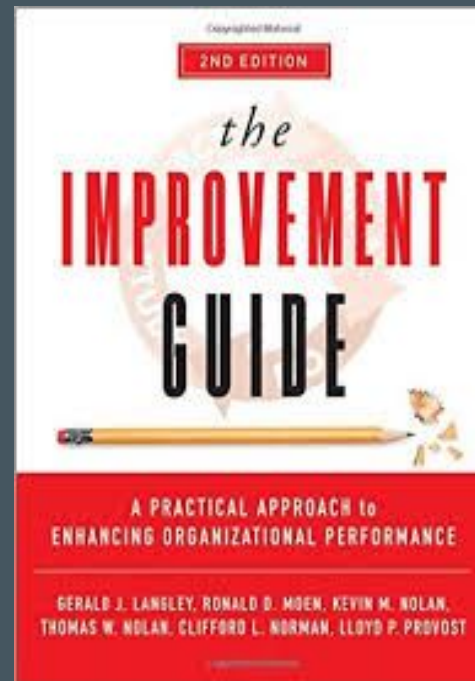


# A Reading List for Leaders, Part 1



**Peter Senge:**  
***The Fifth Discipline***

**Jerry Langley,  
Tom Nolan, &  
Kevin Nolan:**  
***The Improvement Guide***

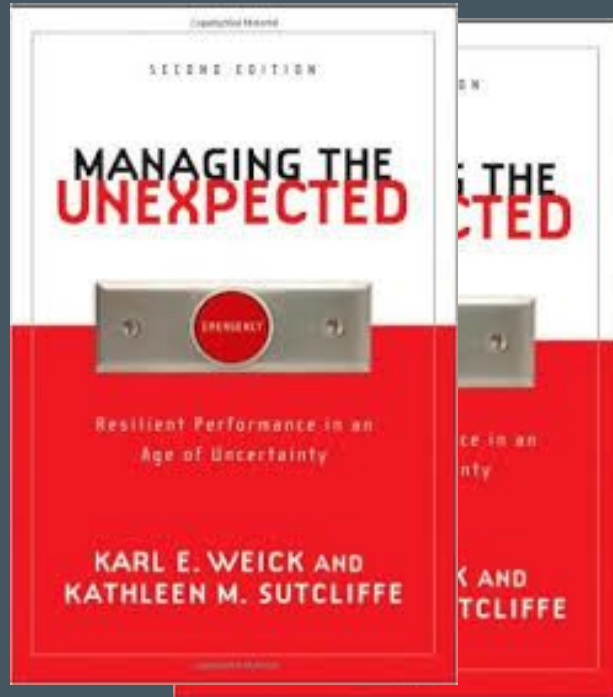


**Chris Argyris:**  
***Overcoming Organizational Defenses***



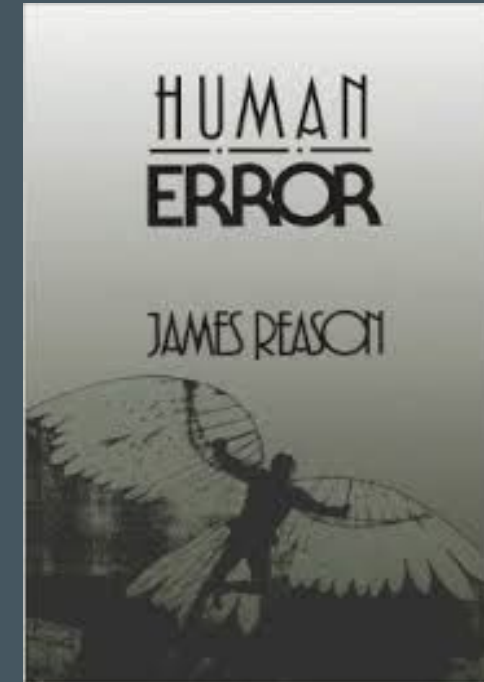
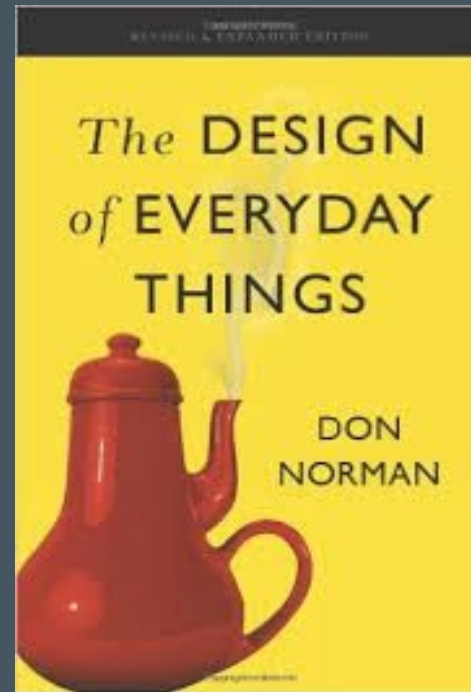


# A Reading List for Leaders, part 2



**Karl Weick and  
Kathleen Sutcliffe:**  
*Managing the  
Unexpected*

**Don Norman:**  
*The Design of  
Everyday Things*



**James Reason:**  
*Human Error*



# From Stuart Duncan, Deputy Director, “Leading Improvement Team,” Scottish Government

We (LIT) are a small team of qualified Improvement Advisers who support policy officials and delivery officers on their improvement journey. We don't just teach (our evidence shows this is not enough) but we also coach and mentor improvers along their individual improvement journey under they tell us 'they get it'. We continue to be funded entirely by SG Health & Social Care and focus on system improvement. We were set-up to 'spread the word' and help any willing wannabe improver. Now we've honed-in on people/ organisations who have the greatest impact on improving equity and reducing social inequality (i.e., the social determinants of health). We do support health policy (but not delivery – this is done by HIS and NES) but more generally in wider SG, public and third sector.



# The Flower of Scotland (pre 2020)

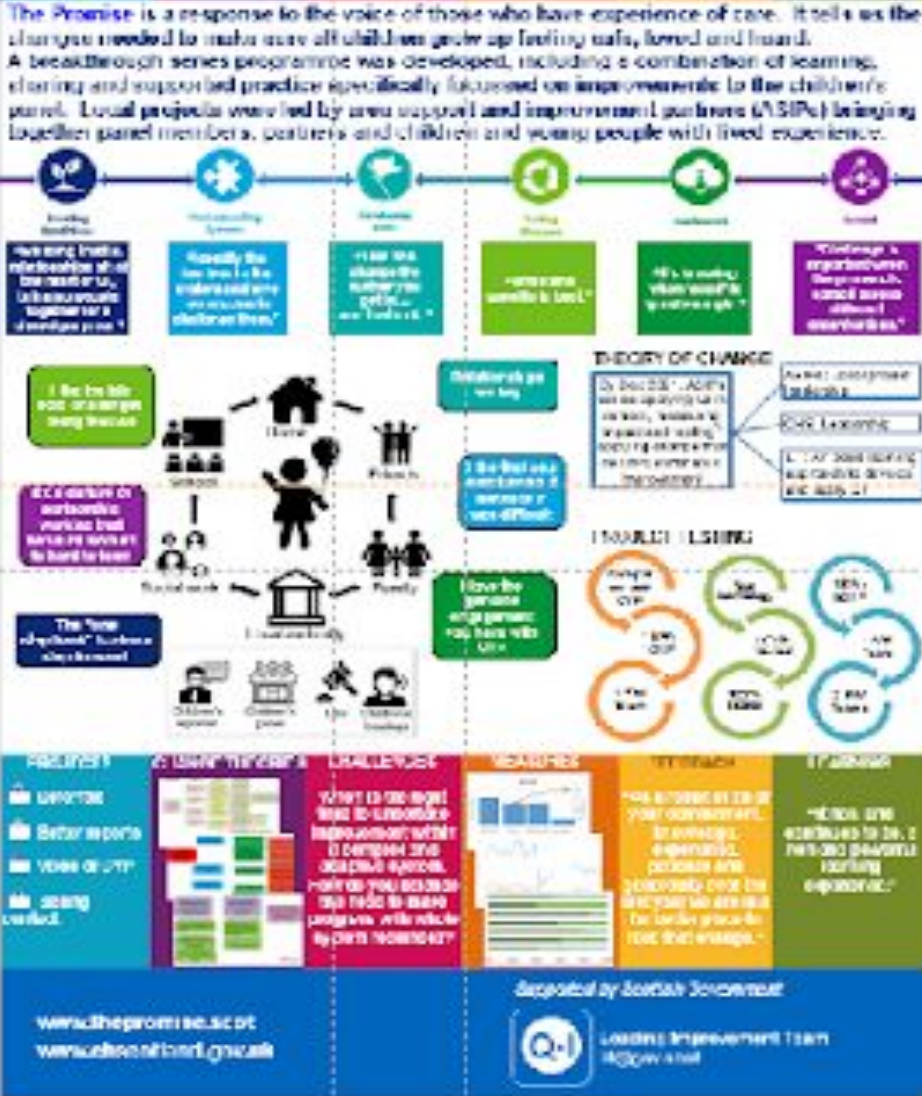
"Our Purpose:  
To focus on creating a  
more successful  
country  
with opportunities for  
all of Scotland to  
flourish through  
increased wellbeing  
and  
sustainable and  
inclusive  
economic growth."



# Reducing trauma experienced by victims of crime

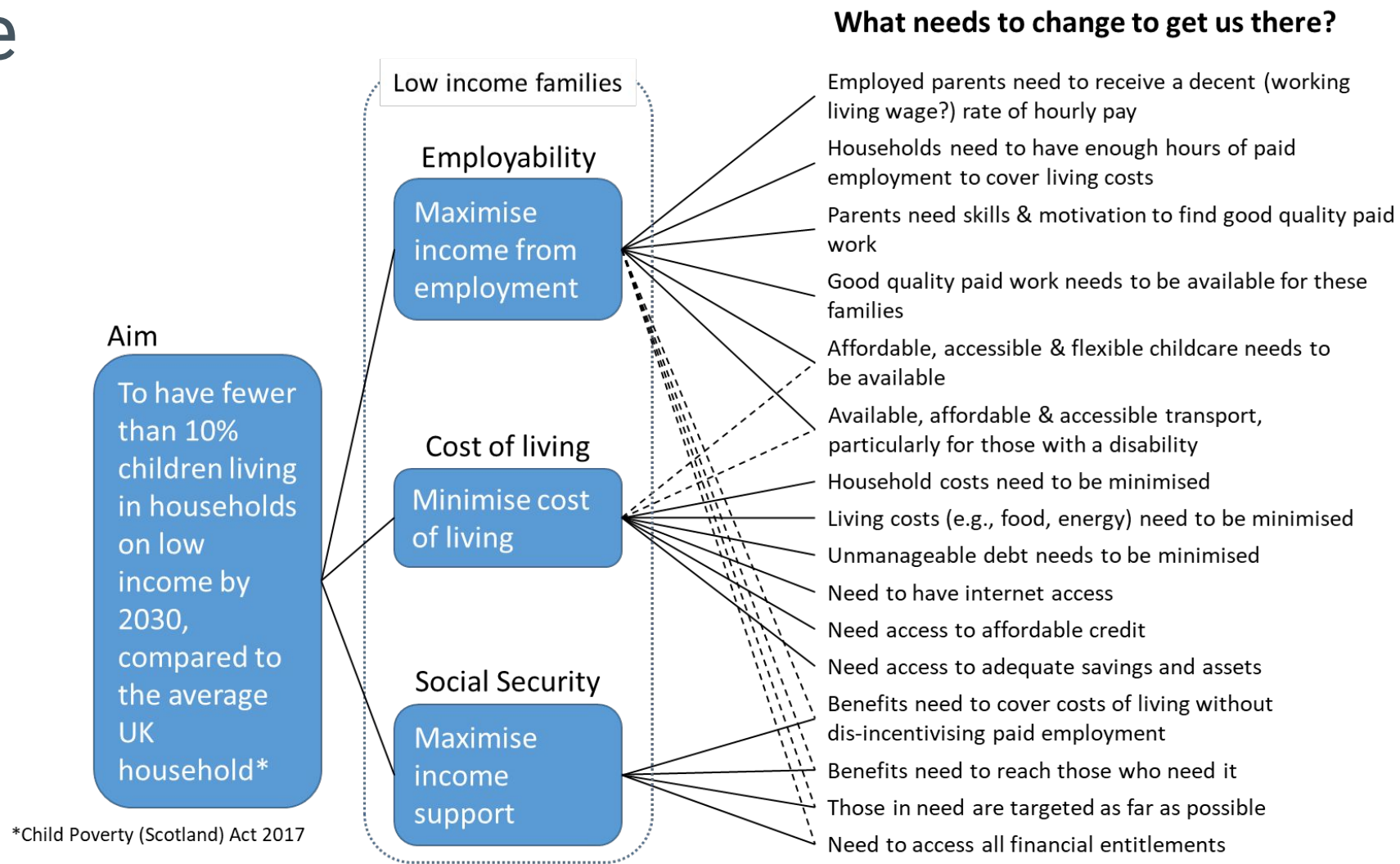






A breakthrough series programme was developed, including a combination of learning, sharing, and supported practice specifically focused on improvements to the children's panel."

# Post 2020: The 3C's - Child Poverty, Covid Recovery, Climate



# Post 2020: The 3C's - Child Poverty, Covid Recovery, Climate

## National Care Service

### Care & Wellbeing Portfolio

1. Integrated Planned Care
2. Integrated Urgent & Unscheduled Care
3. Place & Wellbeing
4. Preventative & Proactive Care



# Post 2020: The 3C's - Child Poverty, Covid Recovery, Climate

## NHSScotland Climate Emergency & Sustainability Strategy 2022-26

Between now and 2026, NHSScotland will focus on 5 priority areas

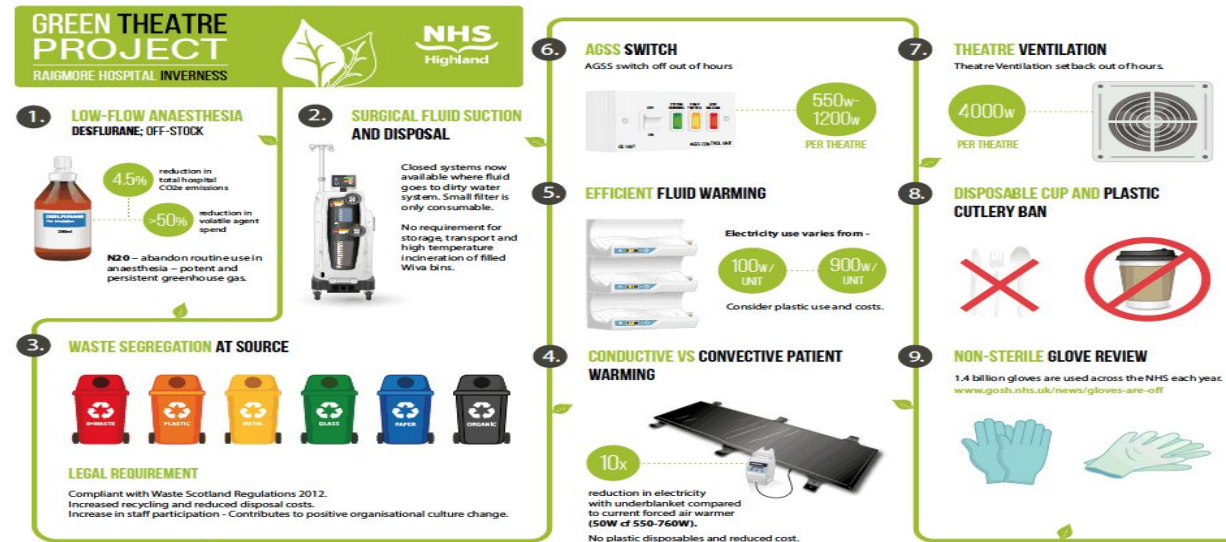
Sustainable  
Buildings &  
Land

Sustainable  
Travel

Sustainable  
Goods &  
Services

Sustainable  
Care

Sustainable  
Communities



# JOY IN WORK

trabalho com  
**alegria**

**HAVING JOY IS BEING CONNECTED TO A PURPOSE.**

A purpose that goes through work and interpersonal relationships.

It is to live and connect with whoever is by your side: a patient, a family member, a co-worker or the one who is next to you .

Joy must be shared, as well as knowledge, good practices and trust.

Participating in the decisions related to your work process contributes for you to live and share as a single team.





## Bela Vista Hospital Complex

520 beds

# How did HSL start its journey?

*Wania Baia attended wave 3  
Especialista em Melhoria Brasil in 2018  
Wania's improvement project was Joy  
in Work at Sirio Lebanese Hospital  
(HSL)*



# Wania's project

## Aim

Increase from 40% to 65% the percentage of employees in the semi-Critical Care Unit agreeing with the affirmative: ***“I participate in decisions related to my work process”***.

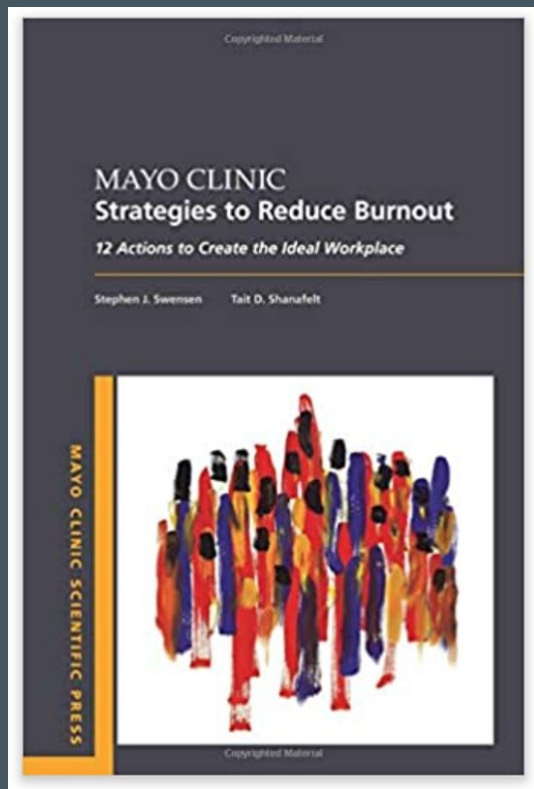
Wania used IHI framework for JIW systematically



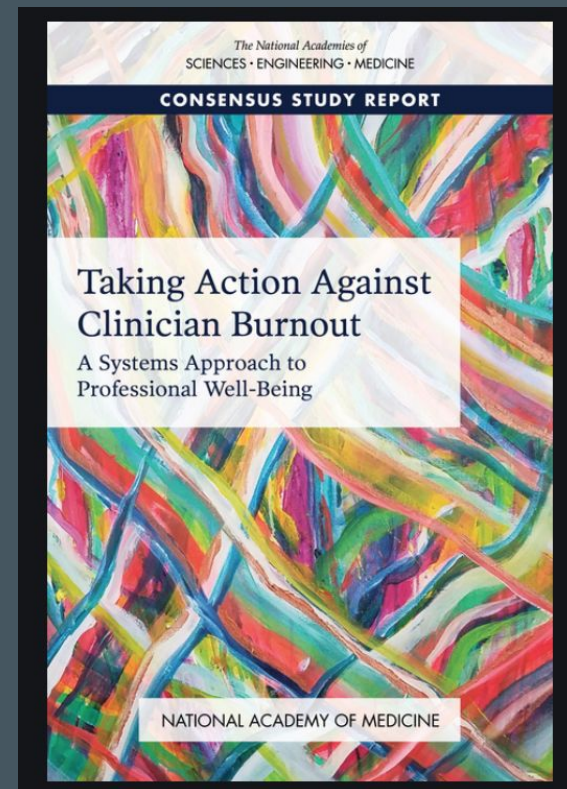


# The Science on Clinician Burnout Has Advanced

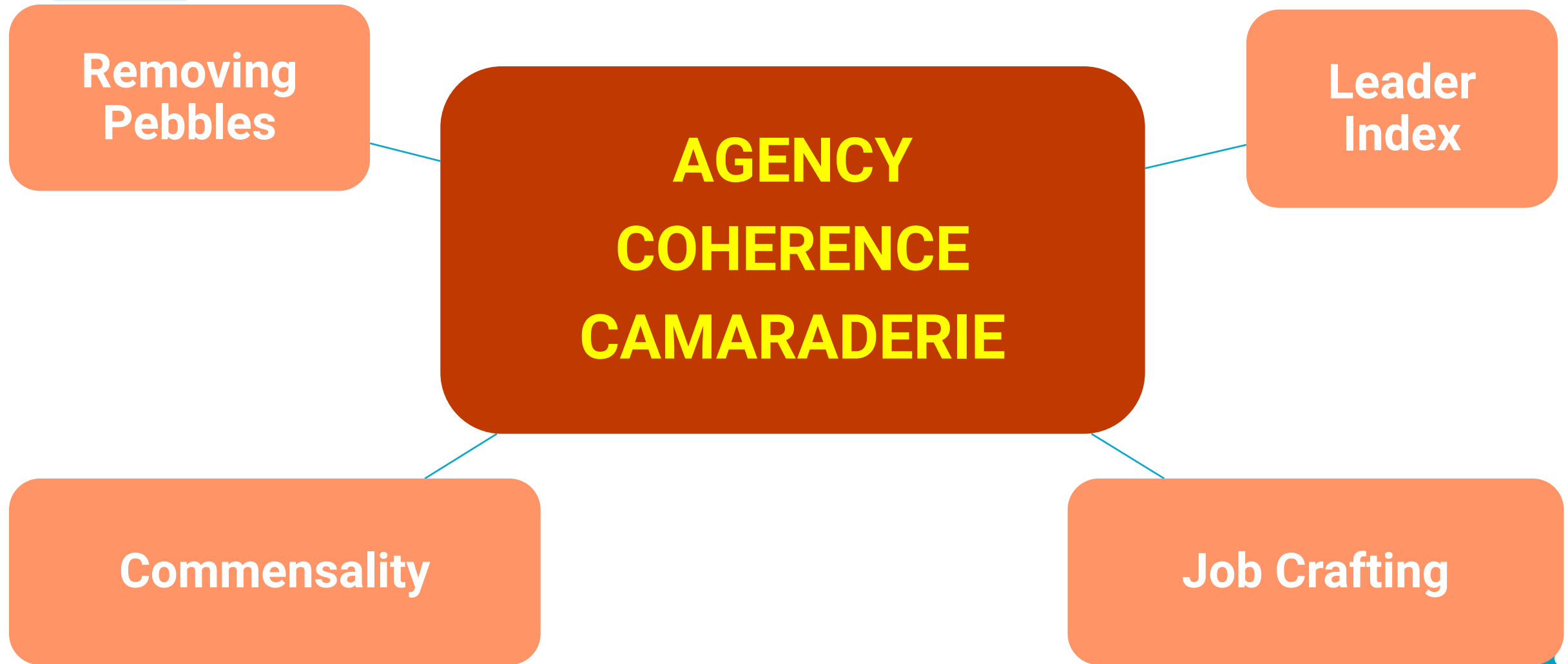
Swensen SJ, Shanafelt TD.  
**Strategies to Reduce Burnout:  
12 Actions to Create  
the Ideal Workplace**



National Academy of  
Medicine.  
**Taking Action Against  
Clinician Burnout**



# Positivity to Flourish



# Project implementation

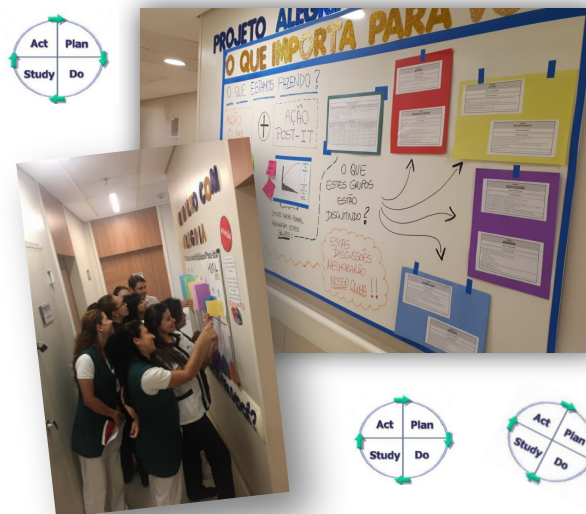
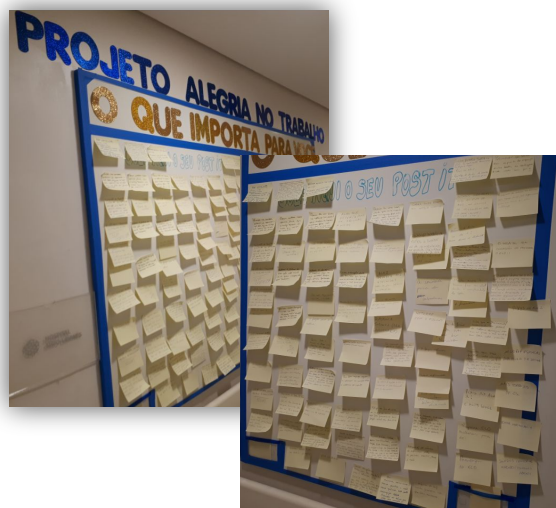


**PHASE 1**  
“What matters to you”

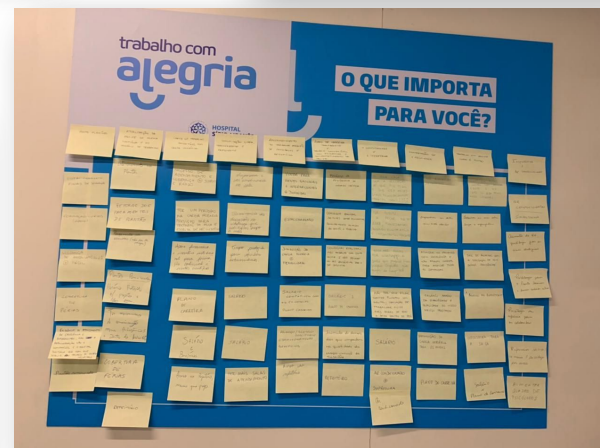
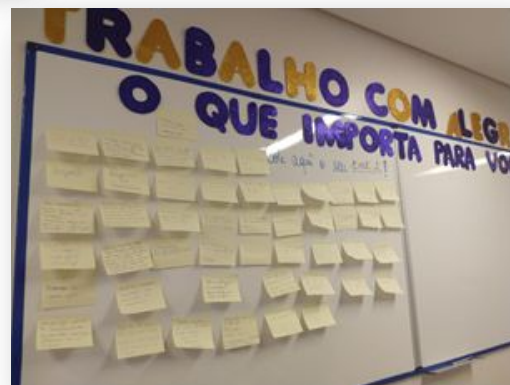
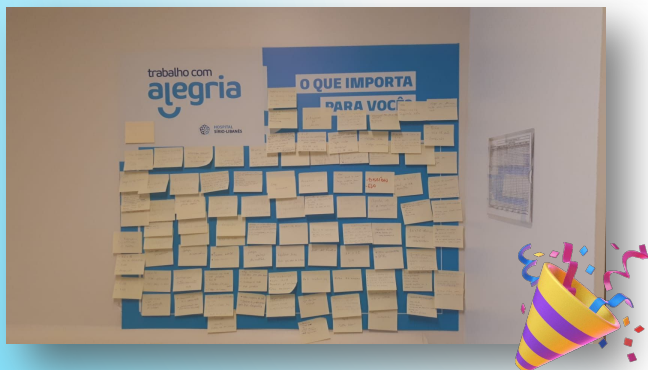
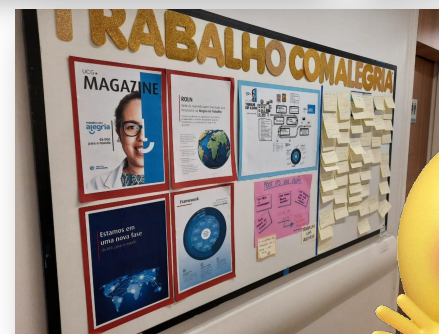
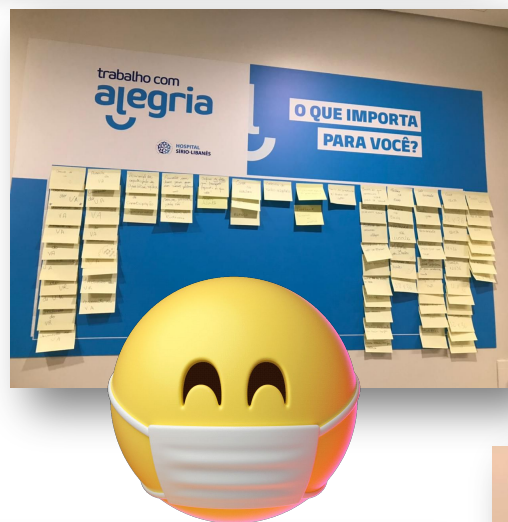
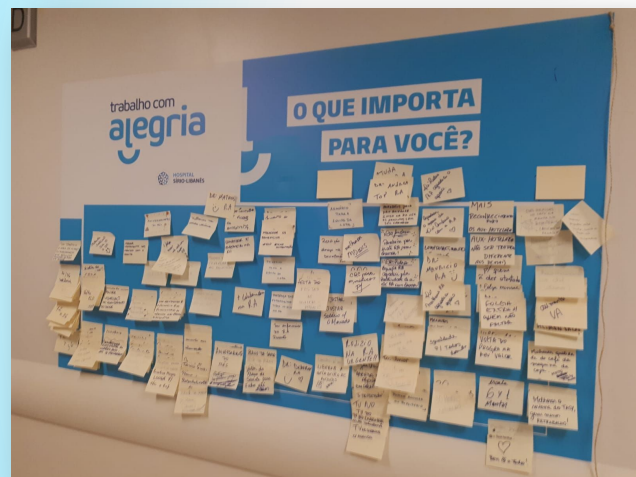
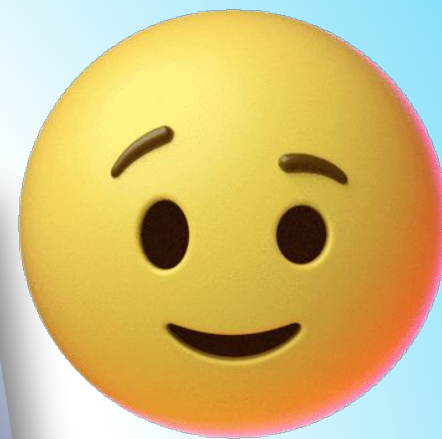
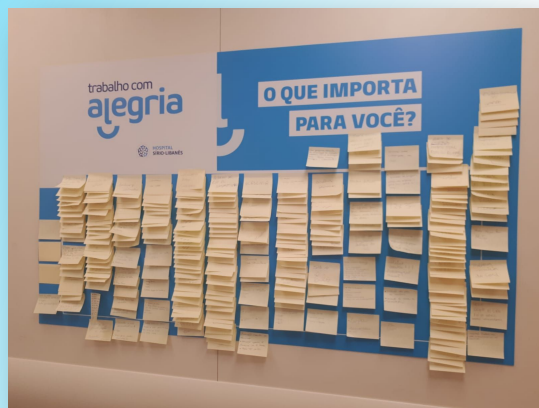
**PHASE 2**  
Affinity grouping (Pareto) – Impediments for JIW

**PHASE 3**  
Co-creation e co-design

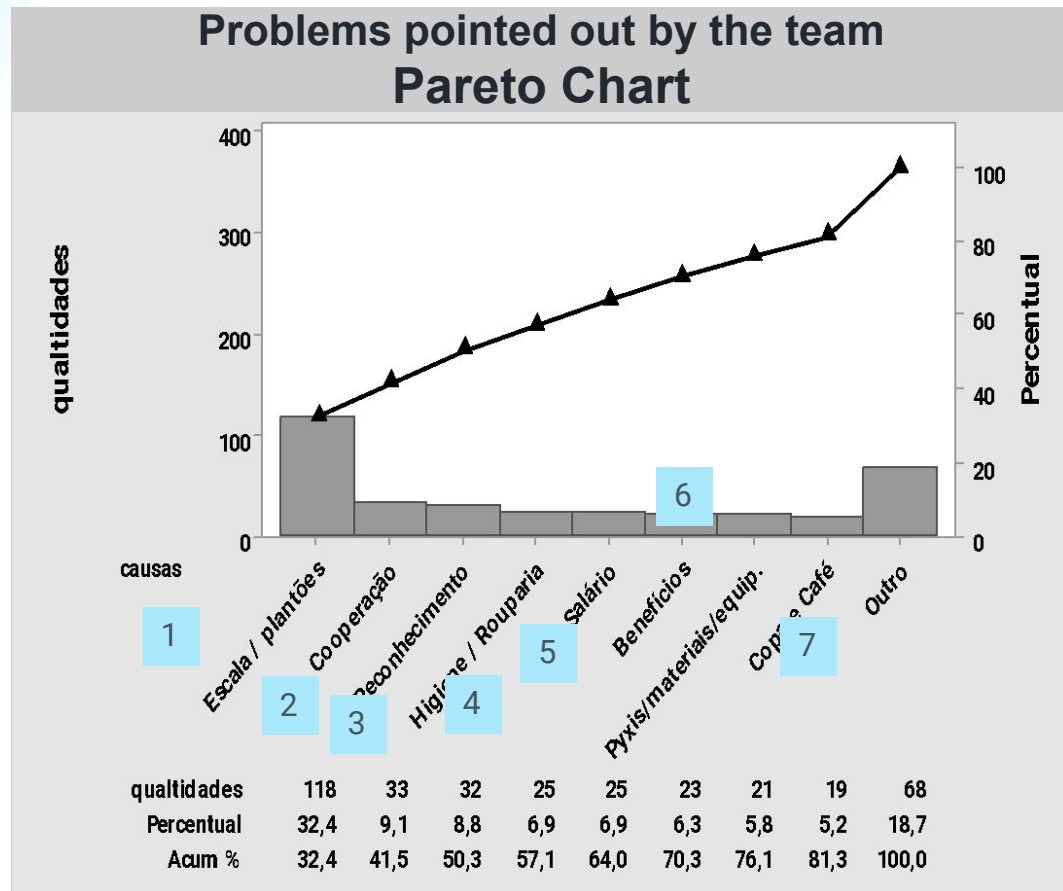
**PHASE 4**  
Sharing the improvements  
Scale up







# Most frequent impediments for JIW



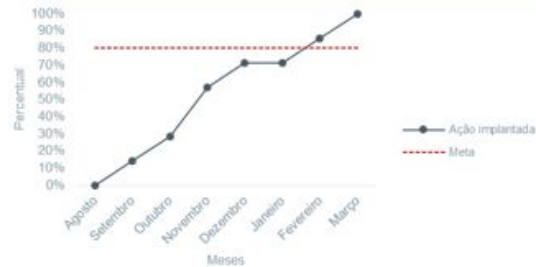
1. Health workers shift schedule (imposed by the coordinator – nurses did not participate in this decision)
2. Cooperation / communication
3. Recognition
4. Laundry service
5. Salary / Benefits
6. Materials and equipment
7. Coffee area (problems with the coffee machine)



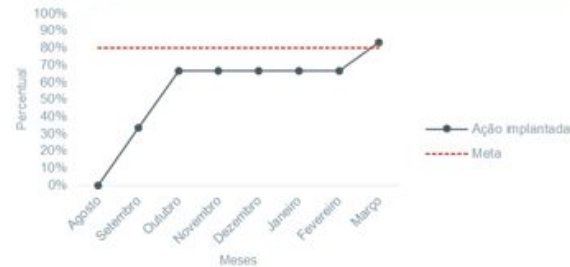
# Processes measures

## % of changes implemented

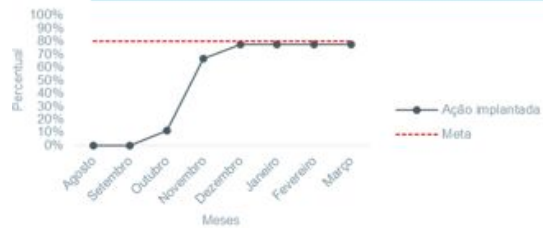
"Nurse shift schedule"



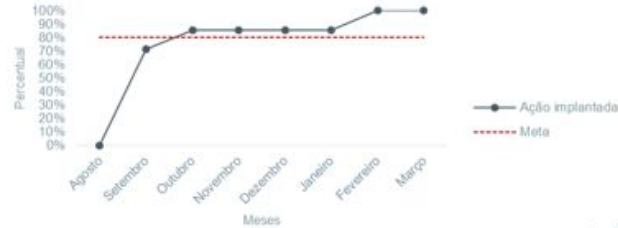
"Cooperation and communication"



Equipment & materials

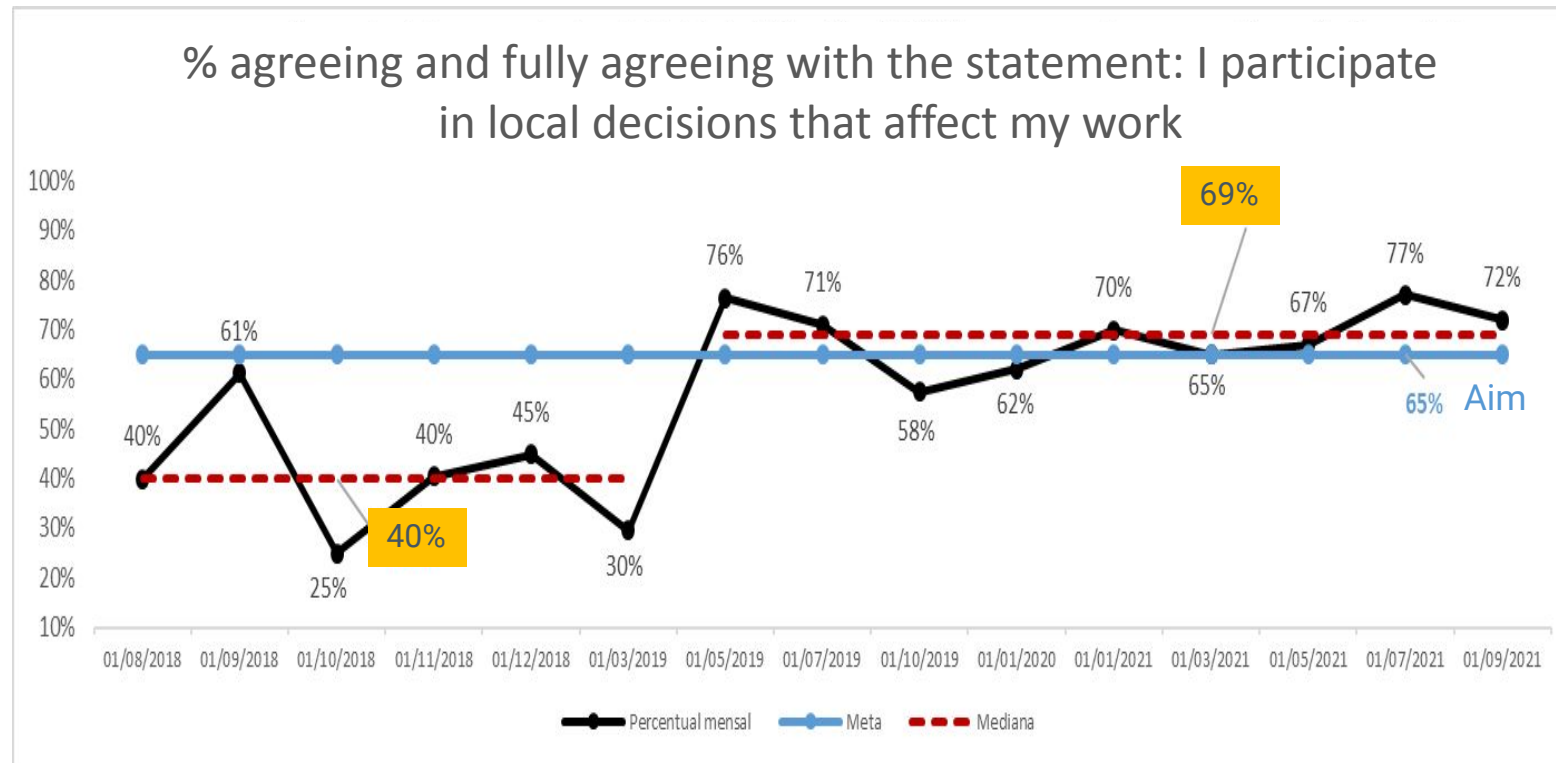


Laundry services



**93%**  
changes  
implemented

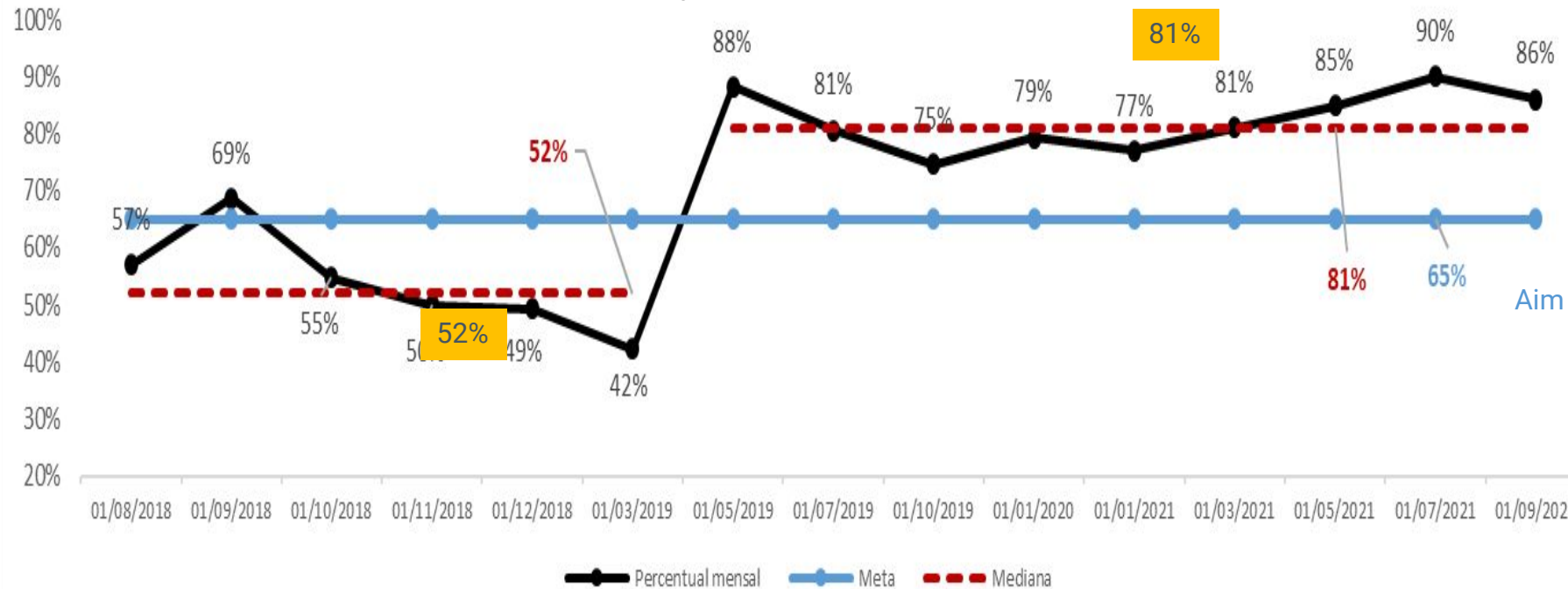
# Outcome measure 1 – Participative management



**What changed?**  
Now I have voice and autonomy

# Outcome measure 2 – Participative management

% agree and fully agree with the statement: The unit's communication channels are easily accessible and sufficient for me to suggest improvements.



## What changed?

Employees have efficient channels to express ideas for improvement in their work process

# Improvements in the areas - examples

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**alegria**



Change in work schedule  
+ autonomy



Greater interface with other  
areas  
+ integration



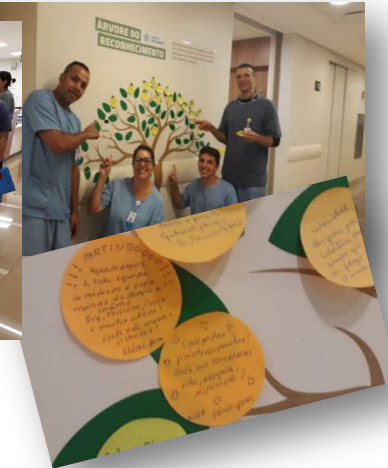
Take care of the  
basics  
+ organization



+ sustainability



Improvement in material  
availability  
+ efficiency



Recognition tree  
+ connection



Patient mobilization  
+ equipment



Newspaper on line  
+ communication





In 2021

## ROLN

Joy and Well-being  
Learning Network: A  
Results Oriented  
Action  
Community

Saiba mais: [ihi.org/JoyResults](https://ihi.org/JoyResults)



# HSL aim during ROLN

Increase from 31% to 65% the percentage of staff experiencing JIW at the semi critical unit, from May 2020 to December 2021.

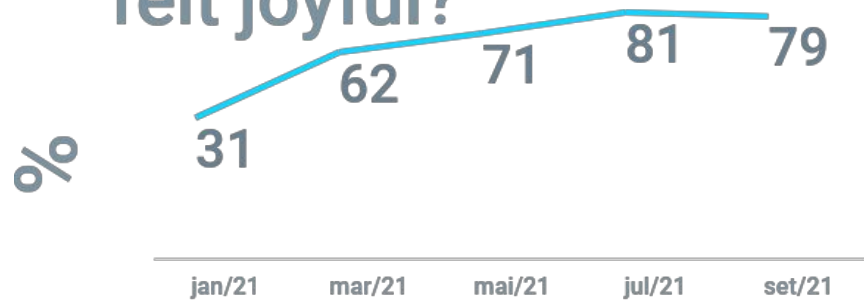
Since “*Participative management*” was implemented during Wania’s Improvement project, HSL started implementing the others eight elements of the framework.

Great attention to “***Physical & Psychological Safety and Wellness and Resilience***” during participation in the ROLN

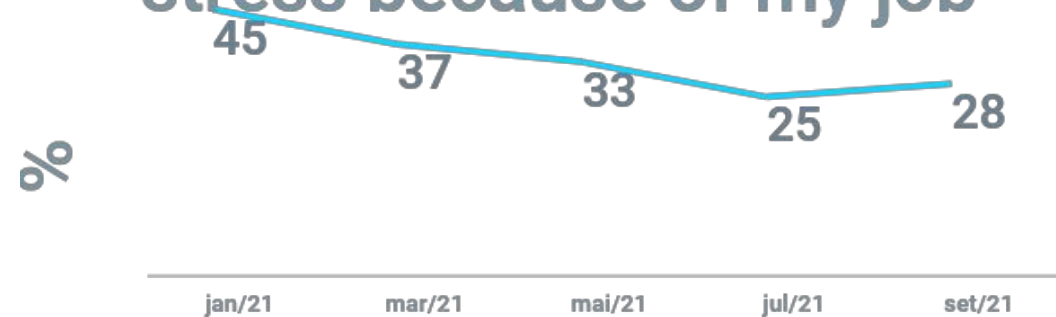


# Measures used during - ROLN MINI-Z

In the past week,  
how often have you  
felt joyful?



I feel a great deal of  
stress because of my job





# Measures used during - ROLN MINI-Z

E-nps



Rate of adverse events with harm - patients



We still investigating concurrent hypothesis to explain this reduction

# Inclusion of all 87 clinical areas (HSL Complex)



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244

Working groups



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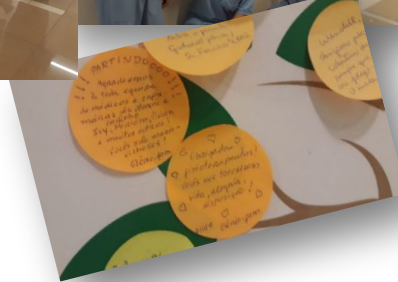
**Change in work schedule  
+ autonomy**



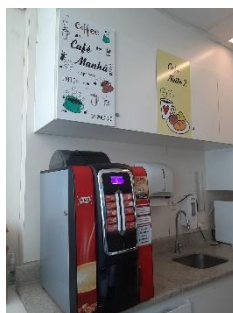
**+ sustainability  
(environment)**



**Recognition tree  
+ connection**



**Greater interface with other  
areas  
+ integration**



**Take care of the  
basics  
+ organization**



**Improvement in material  
availability  
+ efficiency**



**Patient mobilization  
+ equipment**



**Newspaper online  
+ communication**



## New projects

[illegible]

## Redesign of shift handover

[illegible]

## Getting to know the Patient Transfer Sector Recognition



## Celebration birthdays



## Marcação de ponto do colaborador na área de trabalho



## Implementation of Monthly Meetings with the team and leadership

Increase in the amount of disposable cutlery in the area



Scraps near the coffee table, coffee maker and cutlery to remind staff to keep the room clean and organized.

# More improvement projects



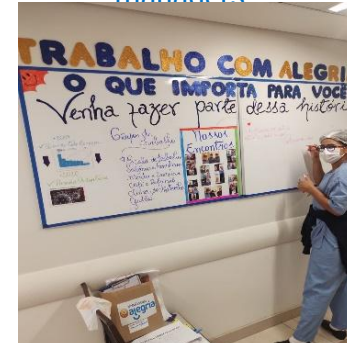
Training resources  
Playful games to train people



Clinical practices: workflow optimization for document validation



Operation room meeting with managers



Promotions  
Board of promotions in each sector



Review the Checklist for replacement of materials and medications in the endoscopy room



Reallocation of the Nursing Technician schedule to transport patients from the operating room at an intermediate time



Redesign of development of non medical areas



Better control of surgical agenda on Sundays



Shared shift schedule and distribution and off days pharmacy



More improvement projects



Discussion of cases high expectation with support from psychology in pediatrics



Integrated online newspaper Oncology - external and inpatient areas - improvement in the dissemination of actions in the area



Emergency service: 5S tool integration to workgroups

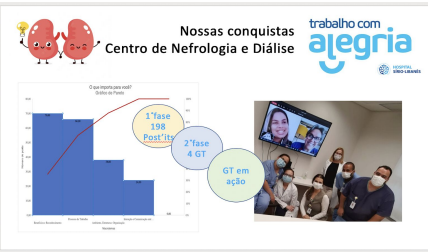
More improvement projects



Improved communication between inpatient units – Online newspaper - UI News



Partnership between multi-site teams and IT to computerize shift handover in pediatrics



discard garbage Sustainability in hemodialysis



Shared preparation of the shifts in the hospitalization units



# And... more improvement projects



Preop vital signs station



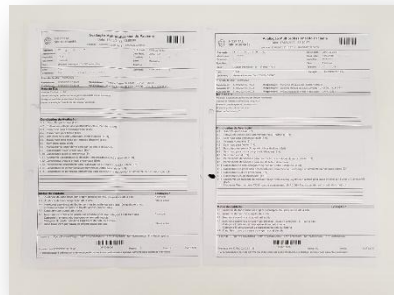
Creation of copies of keys for the nursing team to access the medication cart



Internet for the employees



Recognition to employees



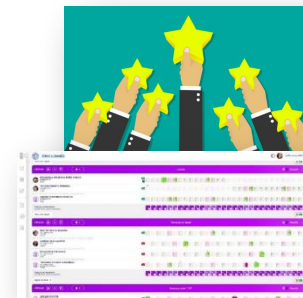
Workload adequacy: dividing SAEs between shifts



Keep the door of the preparation room closed – inpatient units



Improved internal communication by creating new Workplace groups



Recognition project Small vacations



Access and continuity of use of private scrub in semi-intensive units



Uso de uniformes privativos / rotativo – uso exclusivo no hospital



# Joyfull every day!



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*“What prevents the Joy In Work in the organizations is not the difficult or sad moments everyone experiences. It is the systemic conditions of invisible of the healthcare workers”.*

**Wania Baía**

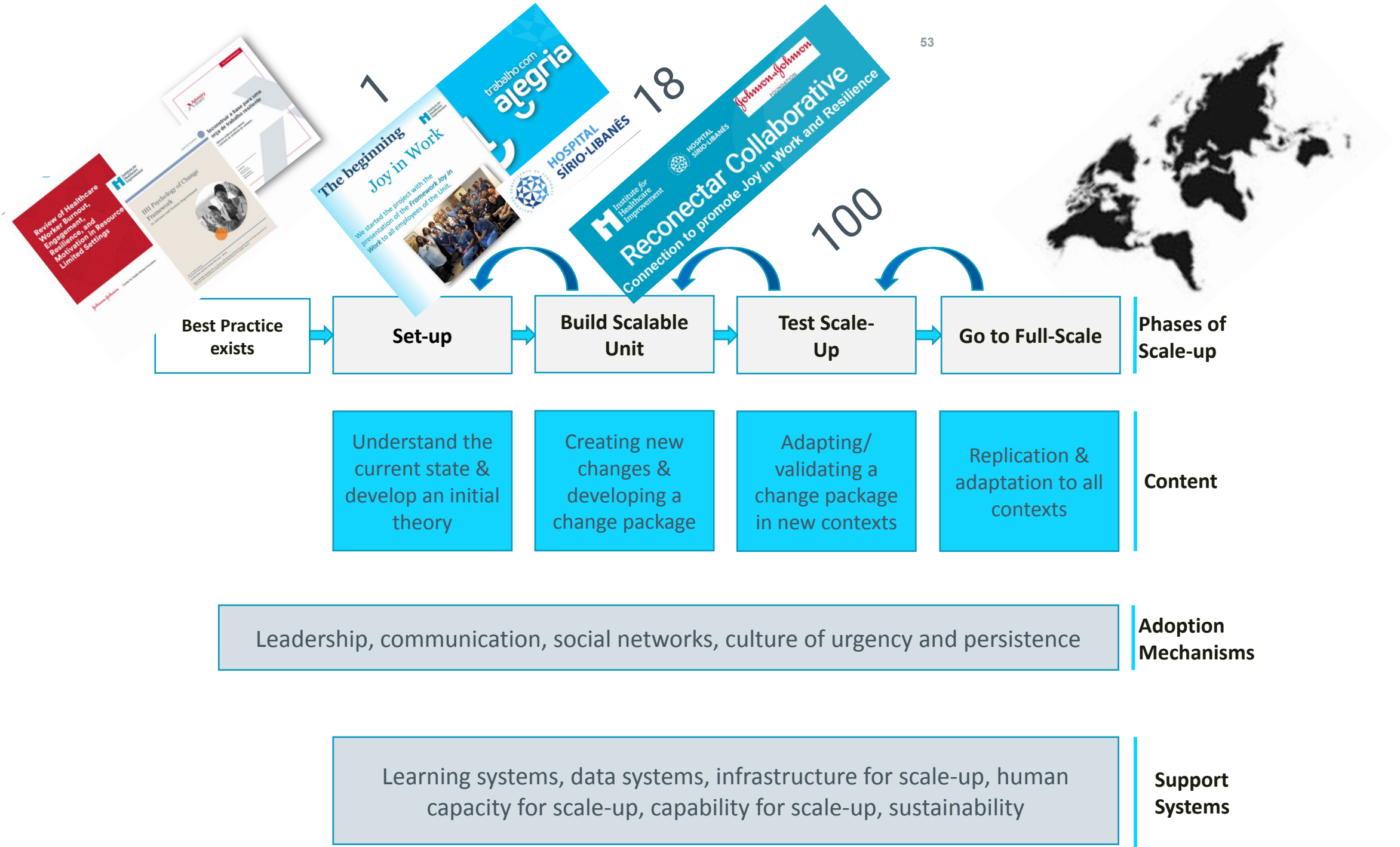
[wania.rmbaia@hsl.org.br](mailto:wania.rmbaia@hsl.org.br)

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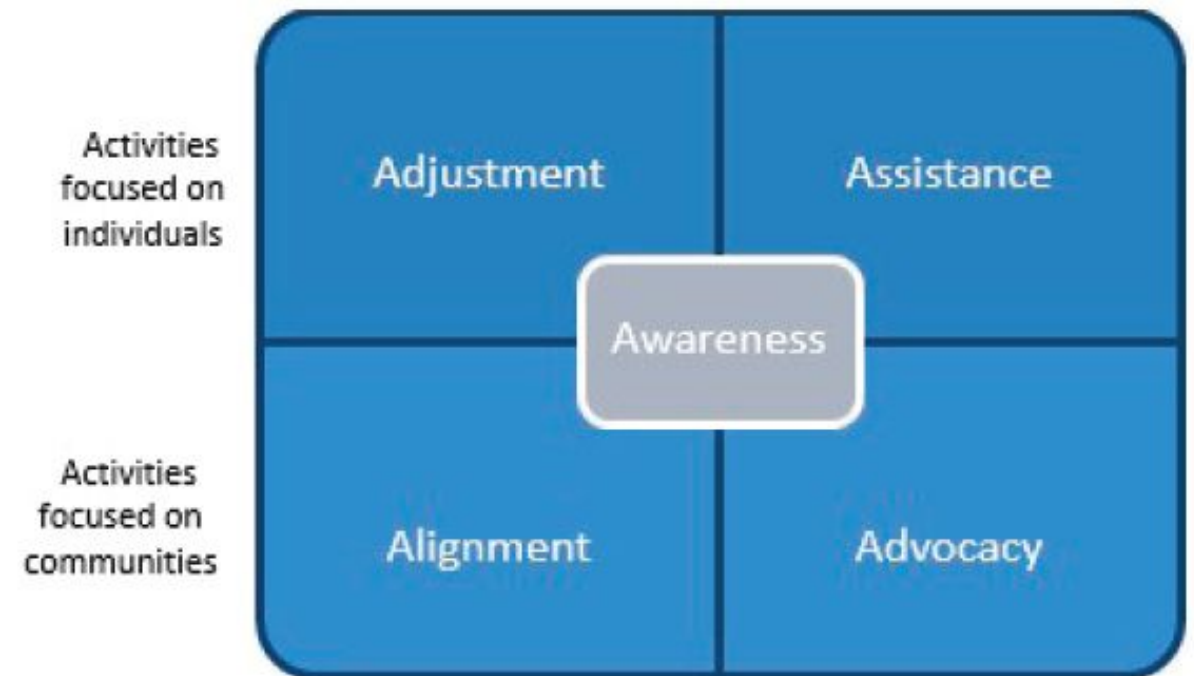
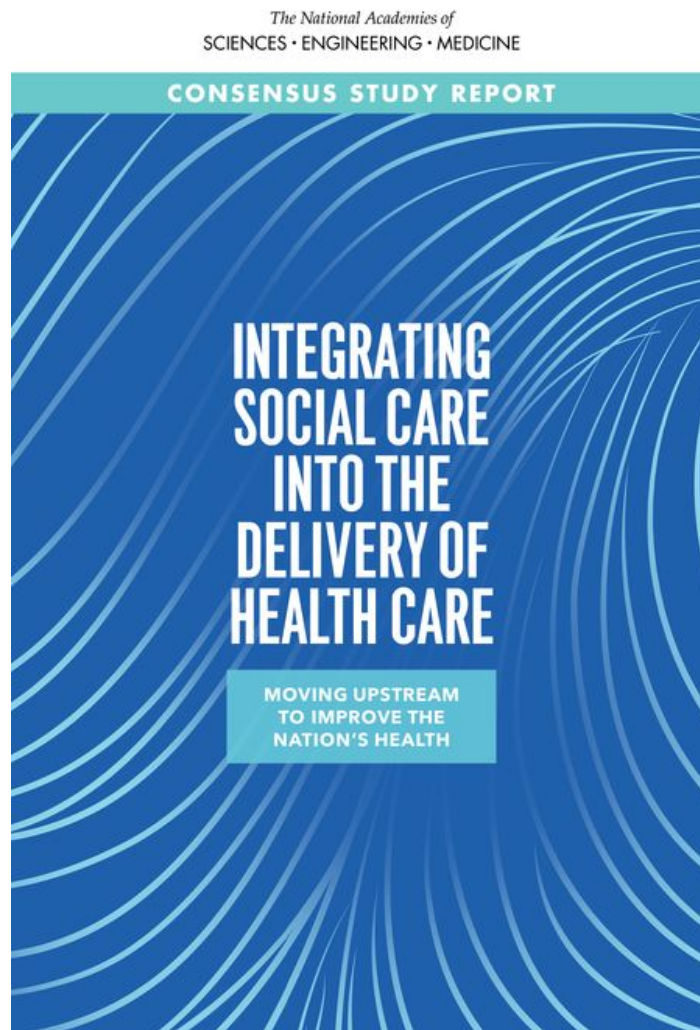


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CONSENSUS STUDY REPORT

# INTEGRATING SOCIAL CARE INTO THE DELIVERY OF HEALTH CARE

MOVING UPSTREAM  
TO IMPROVE THE  
NATION'S HEALTH

Activities  
focused on  
individuals

Activities  
focused on  
communities

Adjustment

Assistance

Awareness

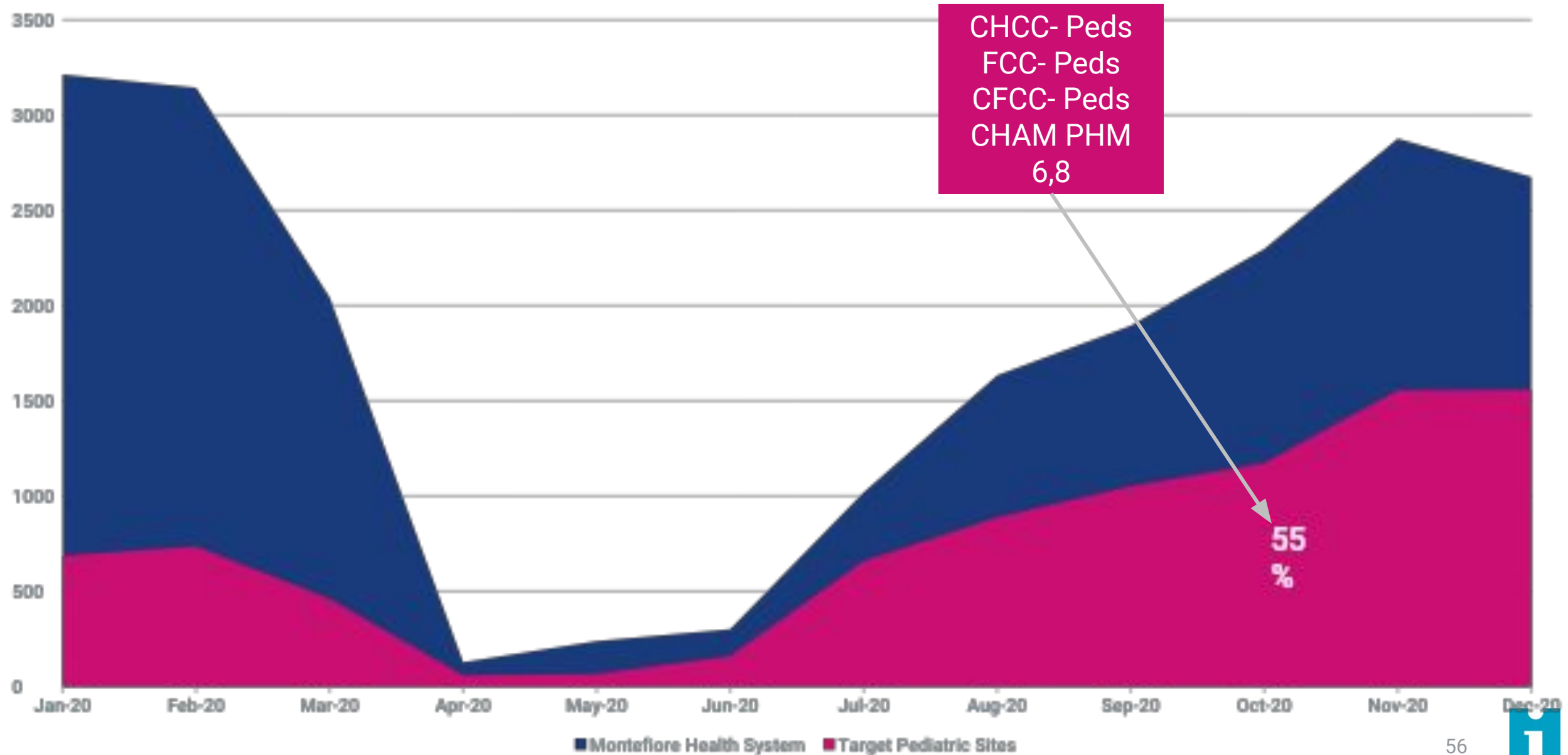
Alignment

Advocacy

Activity	Definition	Transportation-Related Example
Awareness	Activities that identify the social risks and assets of defined patients and populations.	Ask people about their access to transportation.
Adjustment	Activities that focus on altering clinical care to accommodate identified social barriers.	Reduce the need for in-person health care appointments by using other options such as telehealth appointments.
Assistance	Activities that reduce social risk by providing assistance in connecting patients with relevant social care resources.	Provide transportation vouchers so that patients can travel to health care appointments. Vouchers can be used for ride-sharing services or public transit.
Alignment	Activities undertaken by health care systems to understand existing social care assets in the community, organize them to facilitate synergies, and invest in and deploy them to positively affect health outcomes.	Invest in community ride-sharing or time-bank programs.
Advocacy	Activities in which health care organizations work with partner social care organizations to promote policies that facilitate the creation and redeployment of assets or resources to address health and social needs.	Work to promote policies that fundamentally change the transportation infrastructure within the community.

National Academies of Sciences, Engineering, and Medicine. 2019. *Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25467>.

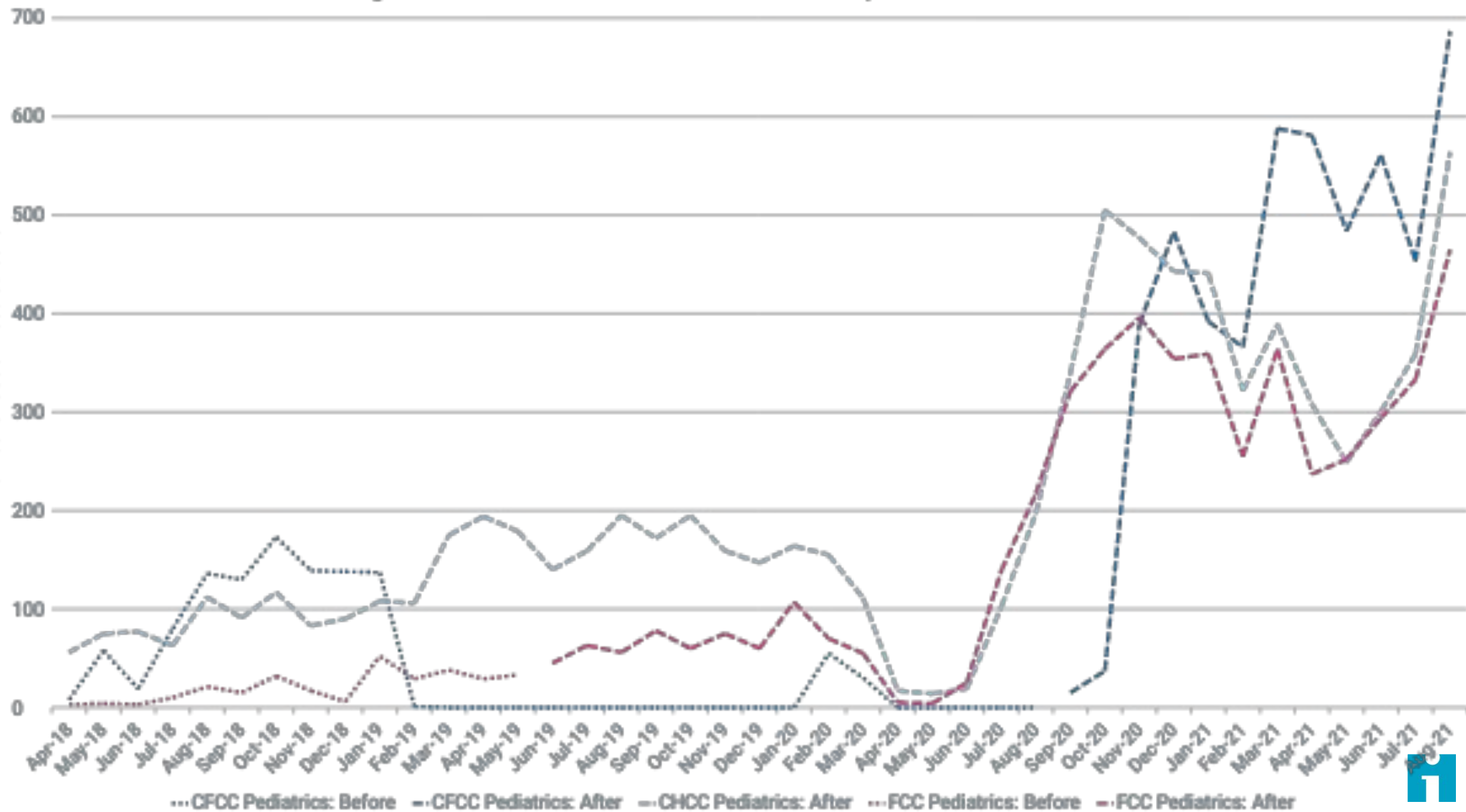
# Academic Gen Pediatrics & CHAM: 55% of Screens in Q4 2020





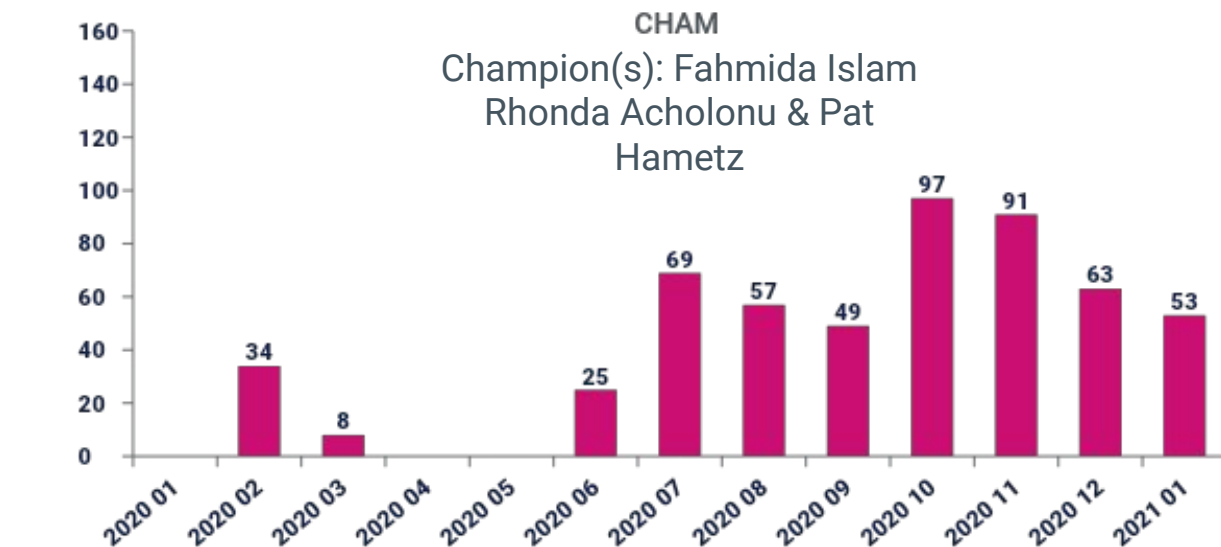
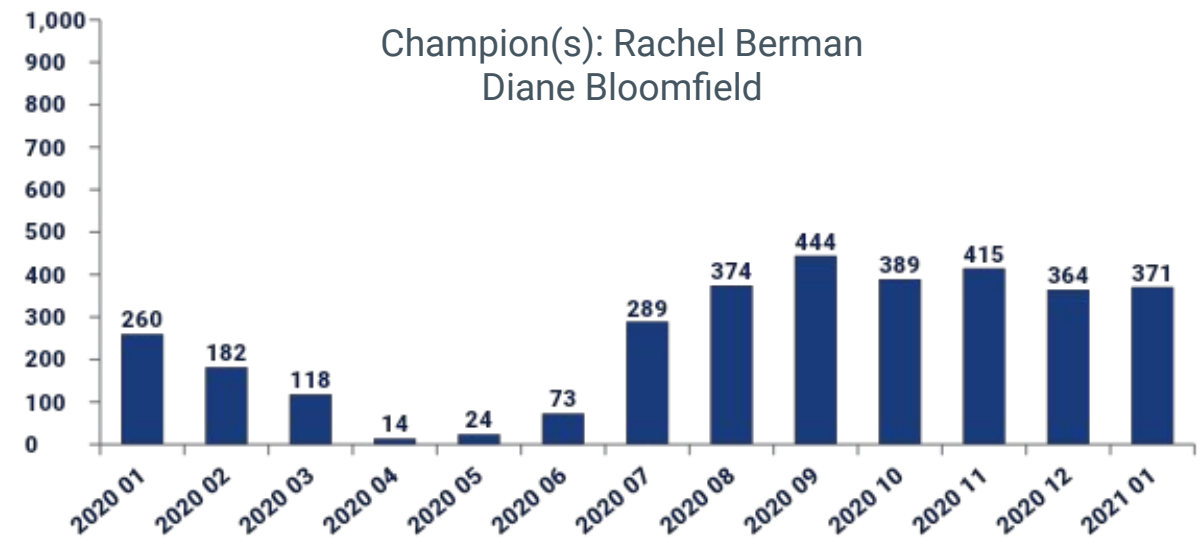
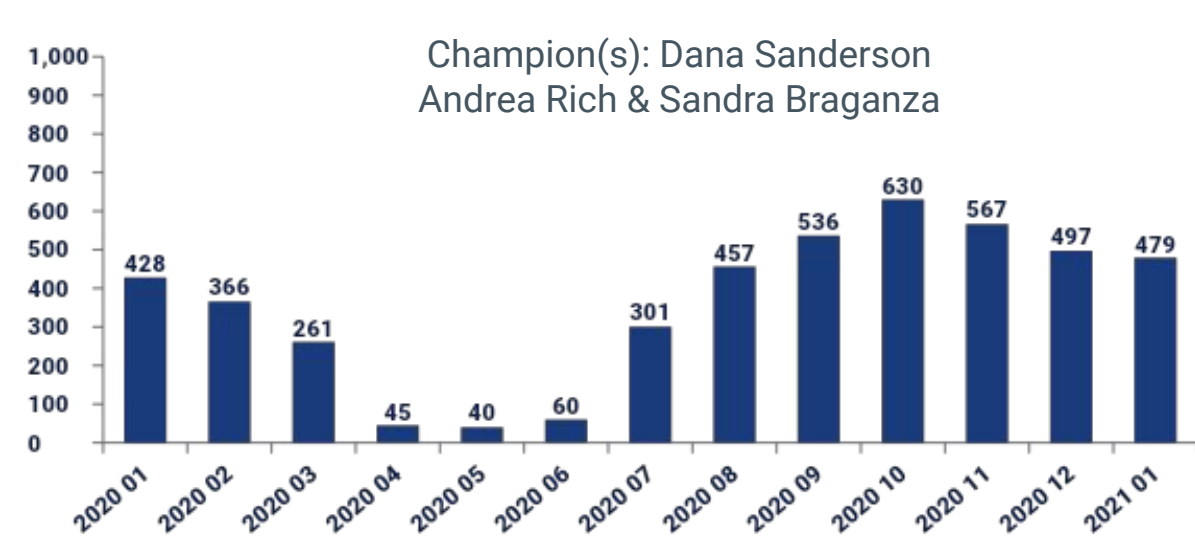
Social Needs Screening Before & After Introduction of a Provider Champion at Three Academic Pediatric Practices

Number of Social Need Screens

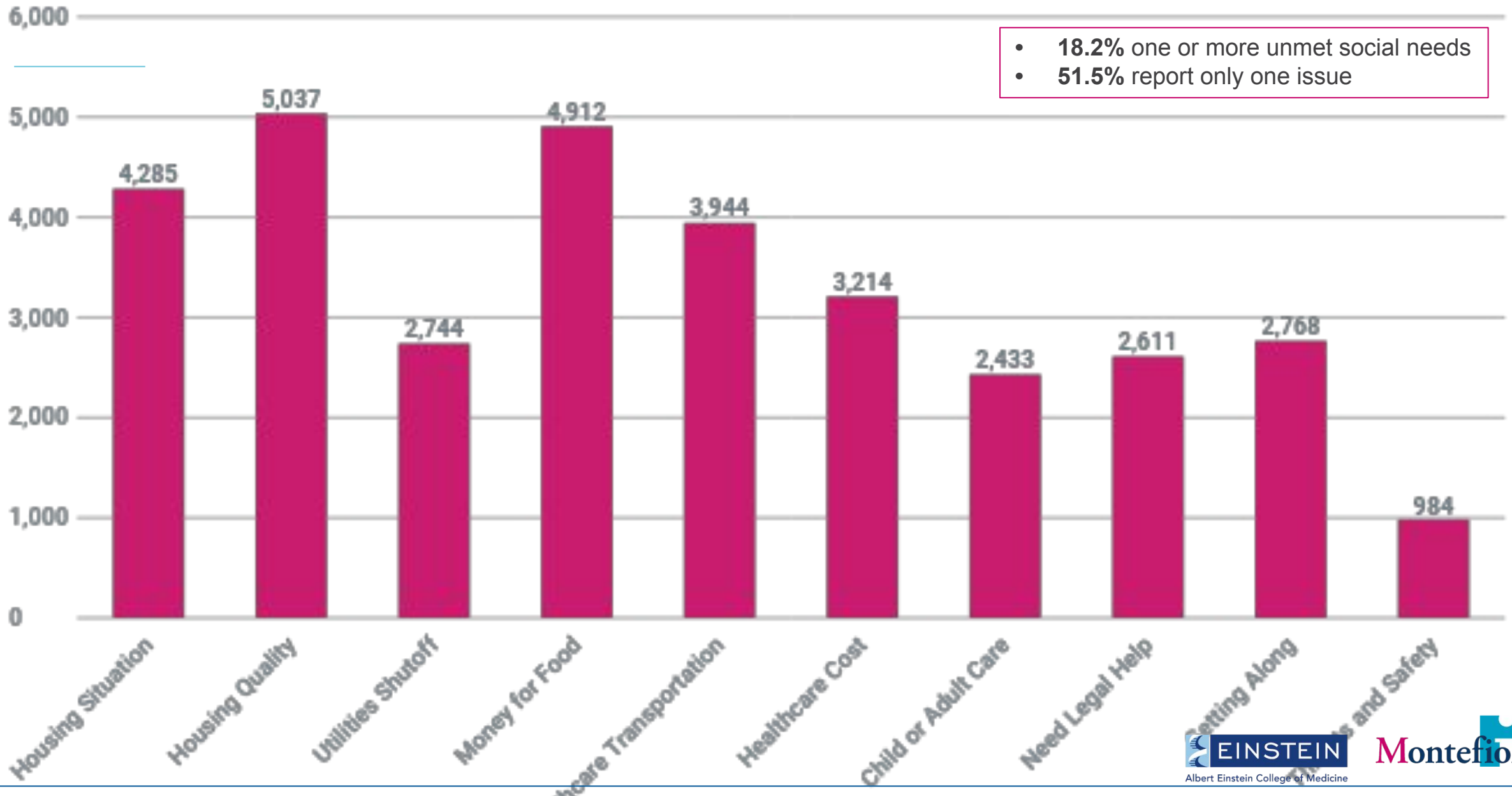


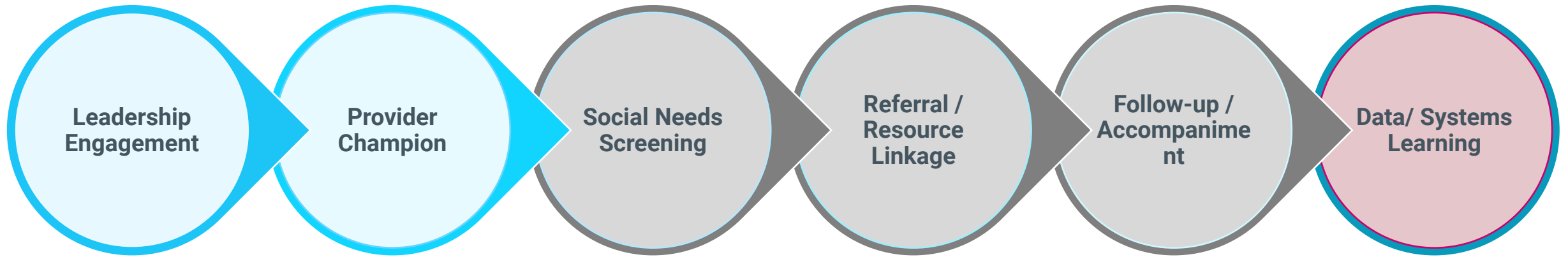


# Early Adopters: Academic General Pediatrics & CHAM, 5334 Screens in Q4 2020



# Social Needs Profile: 126,170 patients April 2018-2022





### **Leadership**

- Medical & administrative buy-in
- Integration within ongoing improvement

### **Provider(s)**

- Adaption lead
- Performance improvement

### **Screening**

- Clear target population (who, when, by whom, where)

### **Referrals**

- Resources Lists
- Service Directories
- CHW/SW coverage

### **Follow-up**

- Multiple outreach
- Ongoing navigation & support

### **Data**

- Dashboard(s)
- Monthly data calls/exchanges

Standardized Workflow

Chart Review Care Everywhere Visit Navigator Plan Wrap-Up Growth Chart Research Studies Immunizations Screenings (Pediatric) Pediatric

Screenings (Pediatric)

ACE (OAS)  
ACE (AAS)  
ASD 12mos  
ASD 18-24mos  
ASD 36mos  
AKO (Other)  
CES-DC  
CRAFT Screening  
CQDC  
QAD-7  
Hearm/Vision  
Hearm/Vision  
LEAD Risk  
M-CHAT R Screen  
MDO  
Old Risk Assess...  
PHQ-9 Adolescent  
PHQ-9 Screening  
PSC (Parent)  
VPR-10 Screening  
SCARED (Child)  
SCARED (Parent)  
SDOH  
TB Risk  
TD Risk  
Vanderbilt (Parent)  
VPRS (Follow up)  
Vanderbilt (Teacher)  
VPRS (Follow up)  
5 Question Screen  
OPSS-5 Self-Reported Screen  
OPSS-5

**Social Determinants of Health - Social Determinants of Health**

Survey Status  
☐ Accepted ☐ Declined  
 Taken 3 days ago: Accepted

Are you worried that in the next 2 months, you may not have a safe or stable place to live? (eviction, being kicked out, homelessness)  
☐ Yes ☒ No  
 Taken 3 days ago: No

Are you worried that the place you are living now is making you sick? (has mold, bugs/rodents, water leaks, not enough heat)  
☐ Yes ☒ No  
 Taken 3 days ago: No

In the last 12 months, did you worry  
☐ Yes ☒ No  
 Taken 3 days ago: No

In the last 3 months, has the electric, gas, or water company threatened to shut off services to your home?  
☐ Yes ☒ No  
 Taken 3 days ago: No

In the last 3 months, has lack of transportation kept you from medical appointments or getting your medications?  
☐ Yes ☒ No  
 Taken 3 days ago: No

In the last 3 months, did you have to skip buying medications or going to doctor's appointments to save money?  
☐ Yes ☒ No  
 Taken 3 days ago: No

Do you need help getting child care or care for an elderly or sick adult?  
☐ Yes ☒ No  
 Taken 3 days ago: No

Do you need legal help? (child/family services, immigration, housing discrimination, domestic issues, etc.)  
☐ Yes ☒ No  
 Taken 3 days ago: No

Are you finding it so hard to get along with a partner, spouse, or family members that it is causing you stress?  
☐ Yes ☒ No  
 Taken 3 days ago: No

Does anyone in your life hurt you, threaten you, frighten you or make you feel unsafe?  
☐ Yes ☒ No  
 Taken 3 days ago: No

**Social Determinants of Health**

Screening  
(Awareness)

Referral

Follow-up

Data



		YES / NO
	Are you worried that in the next 2 months, you may not have a safe or stable place to live? (eviction, being kicked out, homelessness)	<input type="checkbox"/> Y <input type="checkbox"/> N
	Are you worried that the place you are living now is making you sick? (has mold, bugs/rodents, water leaks, not enough heat)	<input type="checkbox"/> Y <input type="checkbox"/> N
	In the last 12 months, did you worry that your food could run out before you got money to buy more?	<input type="checkbox"/> Y <input type="checkbox"/> N
	In the last 3 months, has the electric, gas, oil or water company threatened to shut off services to your home?	<input type="checkbox"/> Y <input type="checkbox"/> N
	In the last 3 months, has lack of transportation kept you from medical appointments or getting your medications?	<input type="checkbox"/> Y <input type="checkbox"/> N
	In the last 3 months, did you have to skip buying medications or going to doctor's appointments to save money?	<input type="checkbox"/> Y <input type="checkbox"/> N
	Do you need help getting child care or care for an elderly or sick adult?	<input type="checkbox"/> Y <input type="checkbox"/> N
	Do you need legal help? (child/family services, immigration, housing discrimination, domestic issues, etc.)	<input type="checkbox"/> Y <input type="checkbox"/> N
	Are you finding it so hard to get along with a partner, spouse, or family members that it is causing you stress?	<input type="checkbox"/> Y <input type="checkbox"/> N
	Does anyone in your life hurt you, threaten you, frighten you or make you feel unsafe?	<input type="checkbox"/> Y <input type="checkbox"/> N

Do you want help? ☐ Y ☐ N

CHW REFERRAL

Ambulatory referral to Community Health ☒ ☐ Accept ☐ Cancel

Internal Referral

Class:

Referral: ☐ Override restrictions

Linkage and Referral

Care Coordination and Navigation

Health Promotion and Coaching

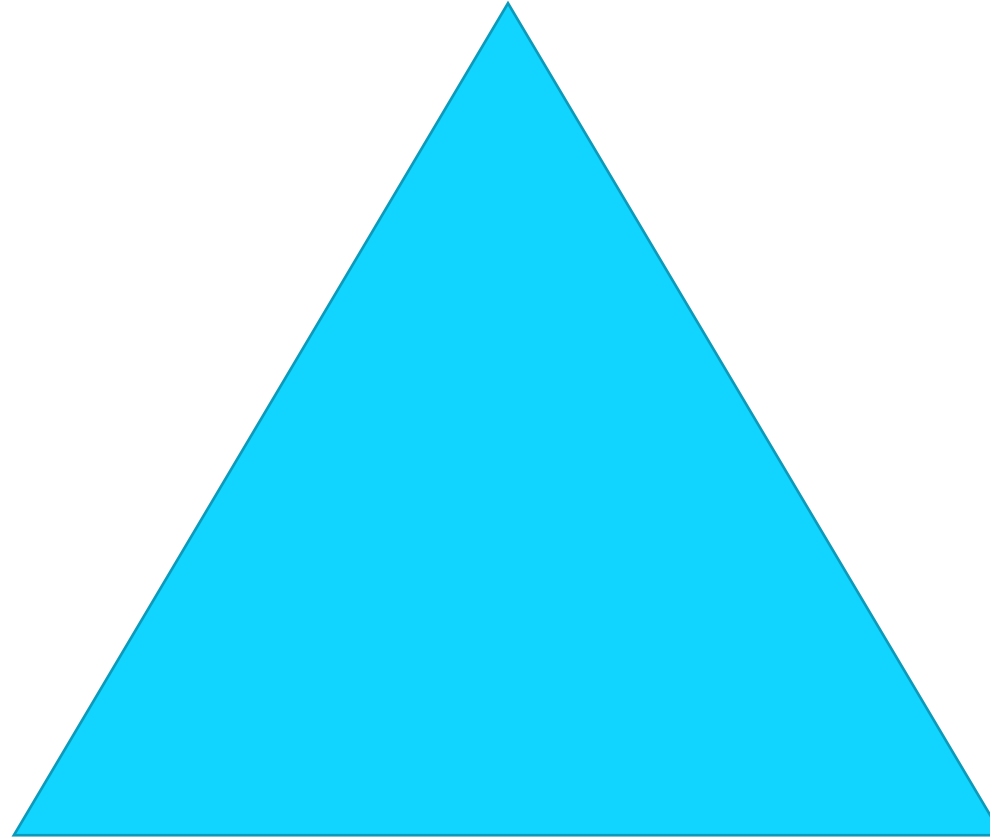
Comments:

Status:



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**MORAL AIMS**



**POLITICAL WILL**

**SCIENTIFIC METHODS**

