

Quality of HealthCare 9

الحمد لله ..

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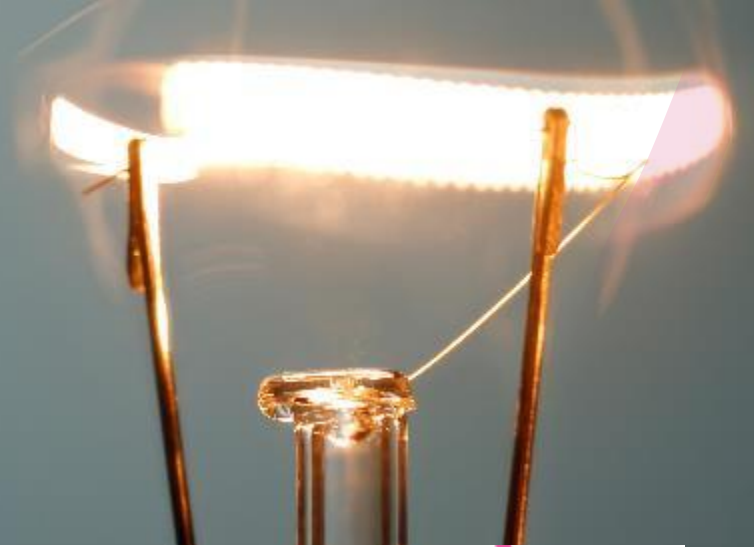
2025

QUALITY

"We have two jobs: our job and the job of improving our job"

Donald Berwick

Job and improve the job



SDG 3: Ensure healthy lives and promote wellbeing for all at all ages

3.8 ACHIEVE UNIVERSAL HEALTH COVERAGE, INCLUDING FINANCIAL RISK PROTECTION, ACCESS TO **QUALITY** ESSENTIAL HEALTH-CARE SERVICES AND ACCESS TO SAFE, EFFECTIVE, **QUALITY** AND AFFORDABLE ESSENTIAL MEDICINES AND VACCINES FOR ALL.

• Quality of care is a key component of the right to health.

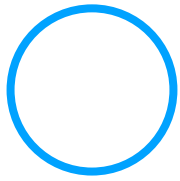

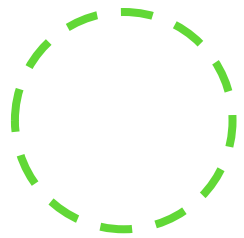
الدولة هي
بجودة الخدمات



WHAT DOES QUALITY MEAN?

Ask yourself:

` A high quality health service would provide care that is.....'?



What does quality mean?

أكثر ما
يُفعل
بموقع
جودة الخدمات

- “Fitness for purpose” (Juran, 1964).
- “Meeting the needs of customers” !!
- “Quality is meeting and exceeding the customer’s needs and expectations and then continuing to improve.” W. Edwards Deming

جودة الخدمات ← تفوق توقع المستهلك
أو المريض...

It is both objective and subjective in n

🔍 Objective:

Measurable standards (e.g., infection rates, wait times).
Compliance with clinical guidelines. *quantitative (أبعدها رقمياً)*

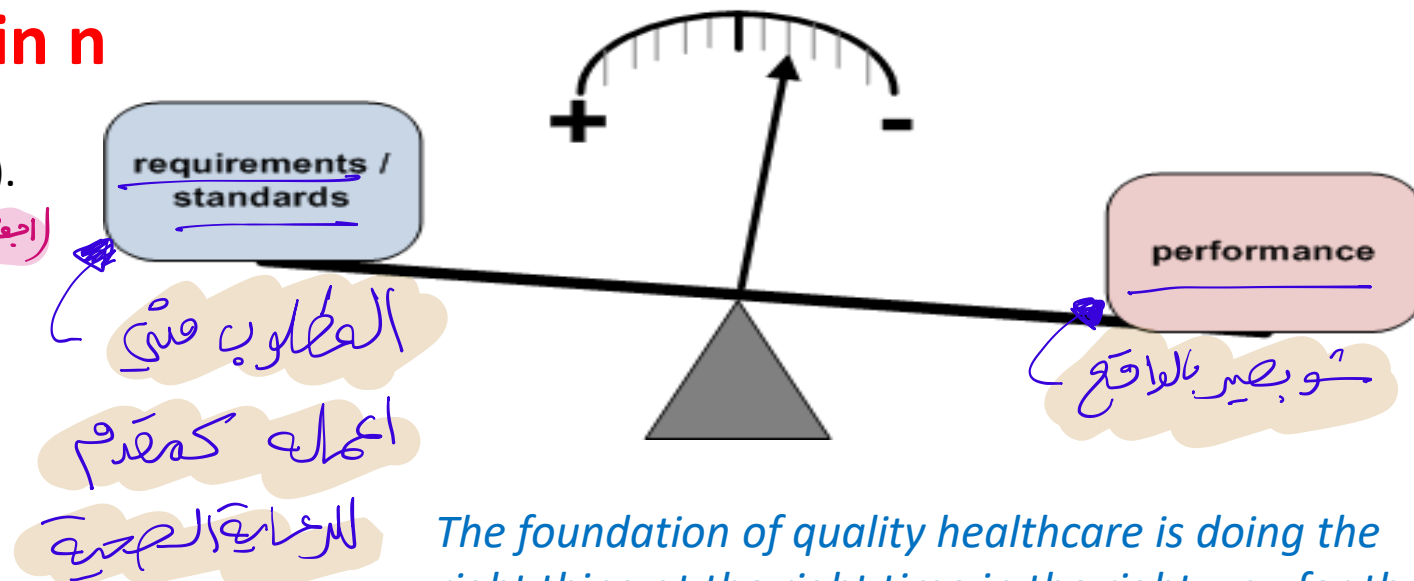
♥ Subjective:

Patient satisfaction (e.g., empathy, communication).

وجهة نظر المريض

لماذا *Quality*؟

↓
Subj... Objec...



The foundation of quality healthcare is doing the right thing at the right time in the right way for the right person and having the best results possible.



The 3 Aspects of Quality Care

السؤال

← مقارنة بينهم
← اختيار واحد منهم

➤ 1. Measurable Quality:

➤ Focuses on the Provider

➤ Objective standards

➤ Care judged by actual performance vs. standards (e.g., Following infection control protocols)

• Required for accreditation

• Uses quantitative data (e.g., infection rates, wait times).

➤ Standards serve as guidelines for measurement

+ providers ← هو الذي يقيسها

* مثلاً مدير المستشفى
كيفه به يعرفه انه كاشي تعلق؟!
من خلال قياس الـ
مقارنة العتوب على ورقه بالواقع
ويكون في Standard (مستوى عالٍ ورقه)

توافق الـ
مع الـ
Standards



➤ 2. Appreciative Quality:

- is the aspect of care which can be judged by the experienced providers **who rely not only on standards but on their personal judgments and experiences as well.** E.g. Peer reviews (e.g., tumor board decisions).
- Balances protocols with **circumstantial judgment.**

3. Perceptive Quality:

- Care perceived/judged **by the recipient of care (patients).**

Quality perceived by the patient is based on the degree of care expressed by health care providers more than **on the physical environment and technical competence.** The last two are essential to prevent dissatisfaction but do not necessarily lead to patient satisfaction.

Communication
with health care providers

العزيم أكثر حسي، فهم ال

حتى وأنه كانت ال technical environment competence

مثلاً حالة قلبية كان ال Standard المكتوب لهاي

الحالة العملية (A) ← فارتبطت لانه أوما ناسته

للمريض ← فخلال خبرتي بعمله العملية B

معارضنا ال protocol يس ال provider

حس الخبرة الي عمله عملتي قديم

*to provide the care

المهم ←

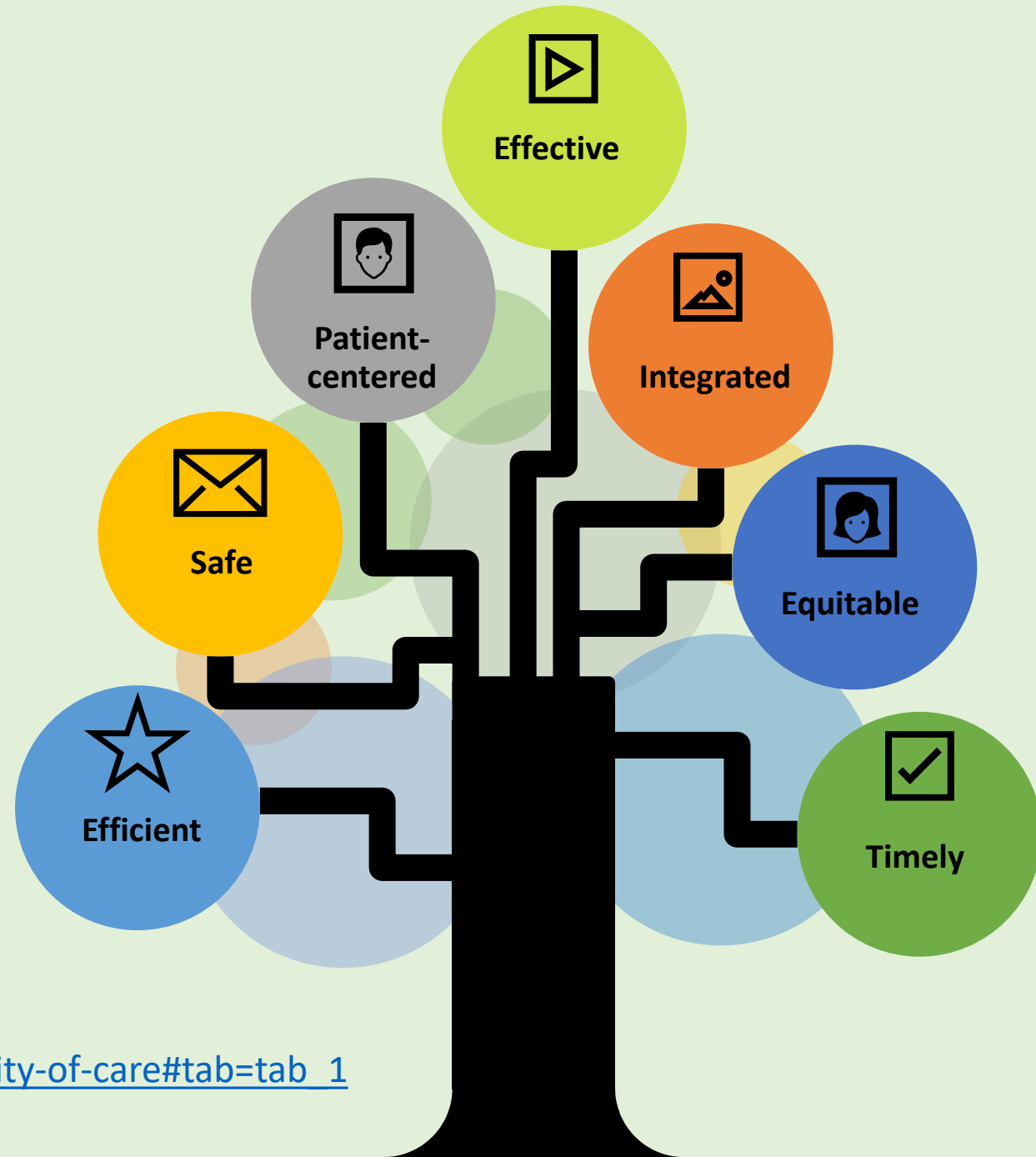
*you have to manage the (3) aspect to each others

و ما تستحق خذوا به فيهم أو نضاهما عندنا بي

*

يعني ممكن المكتوب سبع للمريض فتح وعمله
بطريقة معاصرة ← بس فالتعالج (شواستفوا ١٩)

Key Components of High Quality Health Care



Key Components of High Quality Health Care

1. Patient centered care:

Providing care that responds to individual preferences, needs and values.

Move from
“**What’s the matter?**”
to
“**What matters to you?**”

مُعالجة المريض
وليس المرض

you work around
minimally disruption
to patient

- The patient is not the problem
- “Minimally Disruptive Medicine” (Victor Montori)
- Having conversations with the patient, understanding patients (not just their diseases) and their lives. Respecting cultural/religious preferences (e.g., female providers for certain patients)
- Patient goal setting

عن طريق conversation مع المريض

Quality health care is people-centred.

This means that decisions about your care are tailored to your needs and preferences and you are treated with respect and compassion.



Key Components of High Quality Health Care (cont.)

2. Effectiveness – providing evidence-based healthcare services to those who need them **(% of goals achieved).**

مبتدئ على الدليل العلمي

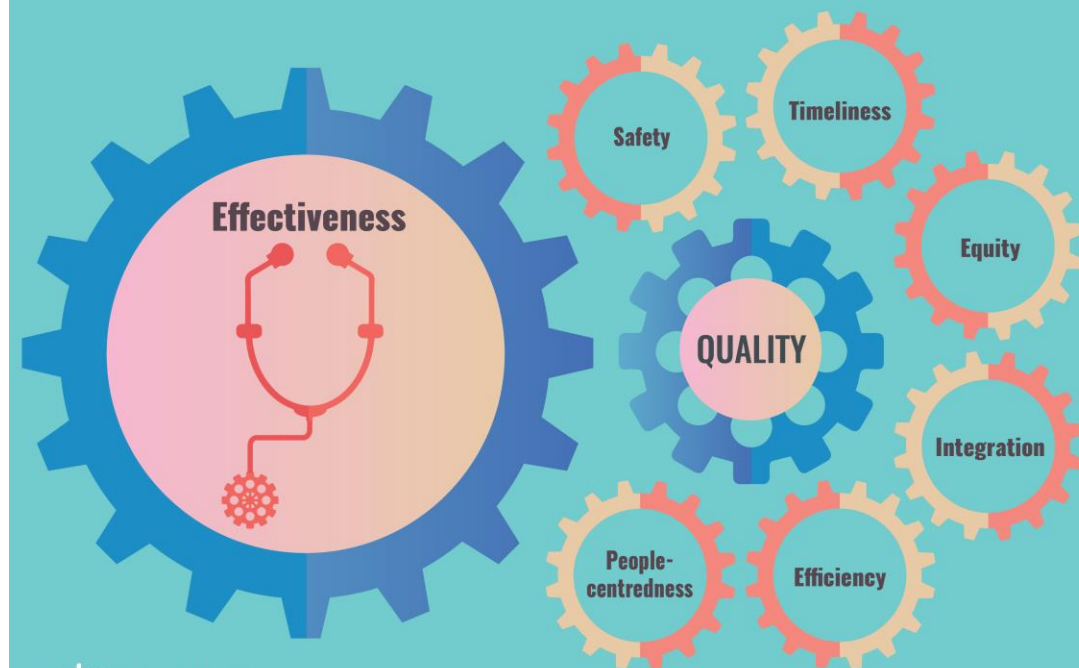
← تقس ال goals الى فئاتها

فإن ← كل patient MI ← بياعهم (Blockers)

← نهاية السنة بشوف كم احوالهم مشكلى
وكم النسبة الى فئاتها
(بتبني كم هو فعال)

Quality health care is *effective*.

This means you will be accurately diagnosed and treated. In some countries, only 35% of patients get the correct diagnosis.



Key Components of High Quality Health Care (cont.)

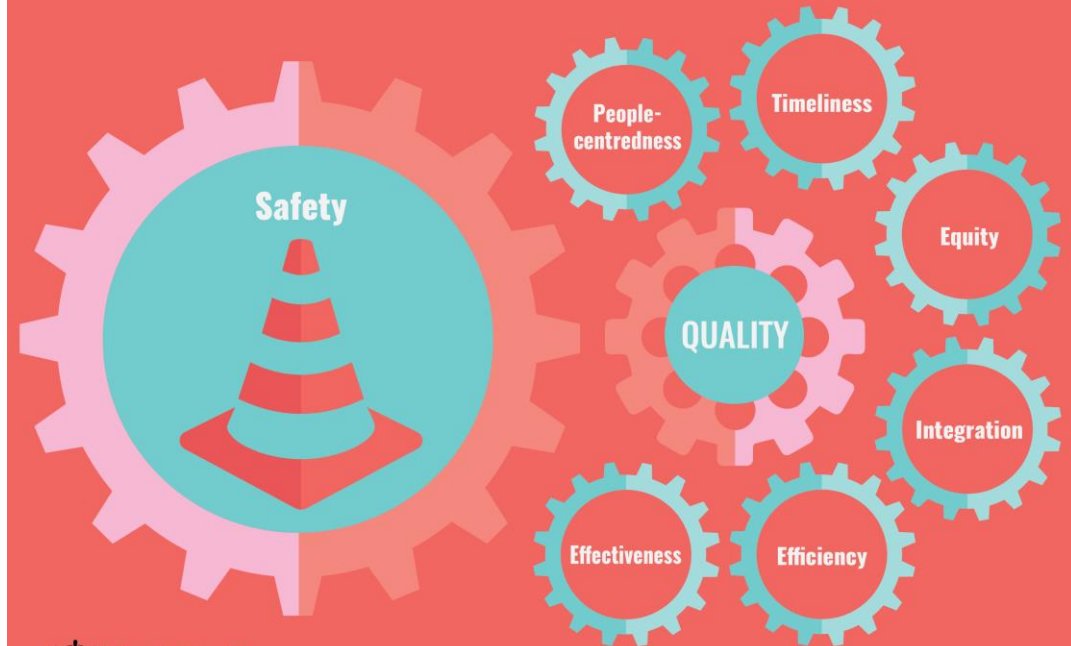
3. Safety: The degree to which the risk of an intervention and risk in the care environment are minimized for patients, visitors, and staff.

للكل للمريض واثق لك بكم
← فتلأ انا بالسيكالي على خيس
← safety ← vaccine

- Examples: *not only for patient*
 - Preventing errors (e.g., wrong-site surgery)
 - Reducing healthcare-associated infections (HAIs)
 - Following WHO Surgical Safety Checklist
 - Hand hygiene compliance programs

Quality health care is safe.

This means the care you receive does not harm you. Around the world, nearly 14% of patients are harmed from the health care they receive during their hospital stay.



4. **Timeliness:** • The degree to which care is provided to the individual at the most beneficial or necessary time (minimize delays).

علاقة عكسية فإني لا

↑ Quality health care and time ↓

Quality health care is *timely*.

This means you can see your doctor when you need to, without waiting too long. In some countries, 74% of patients have to wait between 60 and 120 minutes to be seen by a doctor.



• 5. Efficiency: الكفاءة

- The optimum utilization of *resources* to produce the desired outcomes (maximizing the quality of health care delivered or unit of health benefit achieved for a given unit of health care resources used).

$$\text{Cost} = \frac{\text{الكفاءة}}{\text{وحدة}} \times \text{مقياس}$$

- Example: Eliminating unnecessary tests/treatments (e.g., repeat labs)

Note: Efficacy: The potential capacity or the capability of care to produce the *desired outcomes*.

Can it work?	Efficacy
Does it work in reality?	Effectiveness
Is it worth doing compared to other things we could do with the same money?	Cost-effectiveness = Efficiency

مو كازم
رقيق ال Cost
كل ما ارفع ال
Efficacy

مهم الفرق

Quality health care is *efficient*.

This means your laboratory tests will not be repeated unnecessarily. You will not undergo needless imaging tests. Antibiotics will be prescribed only in the case of a confirmed infection.

لزيادة الفهم

1. Efficacy (الفعالية تحت ظروف مثالية)

- تعني: مدى تأثير الشيء (مثل دواء أو تدخل طبي) تحت ظروف مثالية.
- مثال: في تجربة مخبرية أو سريرية يكون كل شيء مضبوط، والمرضى ملتزمين 100%.

✓ تجربة مخبرية/سريرية = high efficacy

2. Effectiveness (الفاعلية في الواقع العملي)

- تعني: مدى التأثير في الحياة الواقعية.
- مثال: ممكن الدواء كان فعال جداً في المختبر، لكن لما استخدمه الناس في الحياة الواقعية كان تأثيره أقل (بسبب عدم الالتزام أو وجود عوامل أخرى).

✓ حياة واقعية = effective ولا لا حسب الاستخدام الفعلي
ملاحظة مهمة:

Efficacy لا تعني بالضرورة Effectiveness
يعني ممكن الدواء ينجح في المختبر بس ما ينجح عند الناس في الواقع.

3. Efficiency (الكفاءة: التوازن بين التكلفة والنتيجة)

- تعني: هل النتائج التي نحصل عليها تستحق التكاليف؟
- تحسب العلاقة بين الفائدة والتكلفة.
- مثال: ممكن علاج يكون فعال، لكن غالي جداً مقارنة بالفائدة، بالتالي غير كفاء.

✓ كفاءة = فعالية + تكلفة مناسبة
ملاحظة مهمة:

Effectiveness لا تعني Efficiency
يعني ممكن العلاج يكون فعال لكنه غير مجد اقتصادياً.

Efficacy Vs Effectiveness Vs Efficiency

Efficacy = measure of effect under ideal conditions.

Effectiveness = effect under 'real life' conditions.

Efficacy does not imply effectiveness

Efficiency = relationship between costs & benefits.

Effectiveness does not imply efficiency

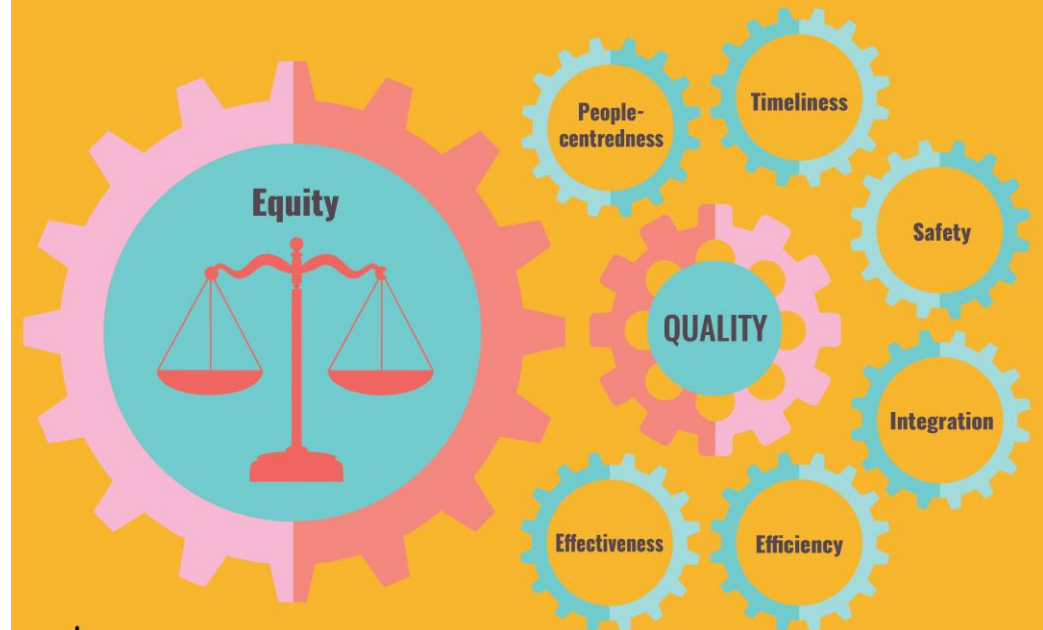
العلاقة ما بين ال
cost and effectiveness

6. Equity: providing care that does not vary in quality on account of gender, ethnicity, geographic location, and socioeconomic status.

- Examples:
 - Equal access regardless of gender, ethnicity, or socioeconomic status
 - Active outreach to marginalized groups
 - Universal health coverage (UHC) policies
 - Mobile clinics for rural populations

Quality health care is *equitable*.

This means that all people, regardless of their gender, race, ethnicity, geographical location or socioeconomic status, receive the good quality health care they need.



Key Components of High Quality Health Care (cont.)

7. Integrated: providing care that makes available the full range of health services throughout the life course

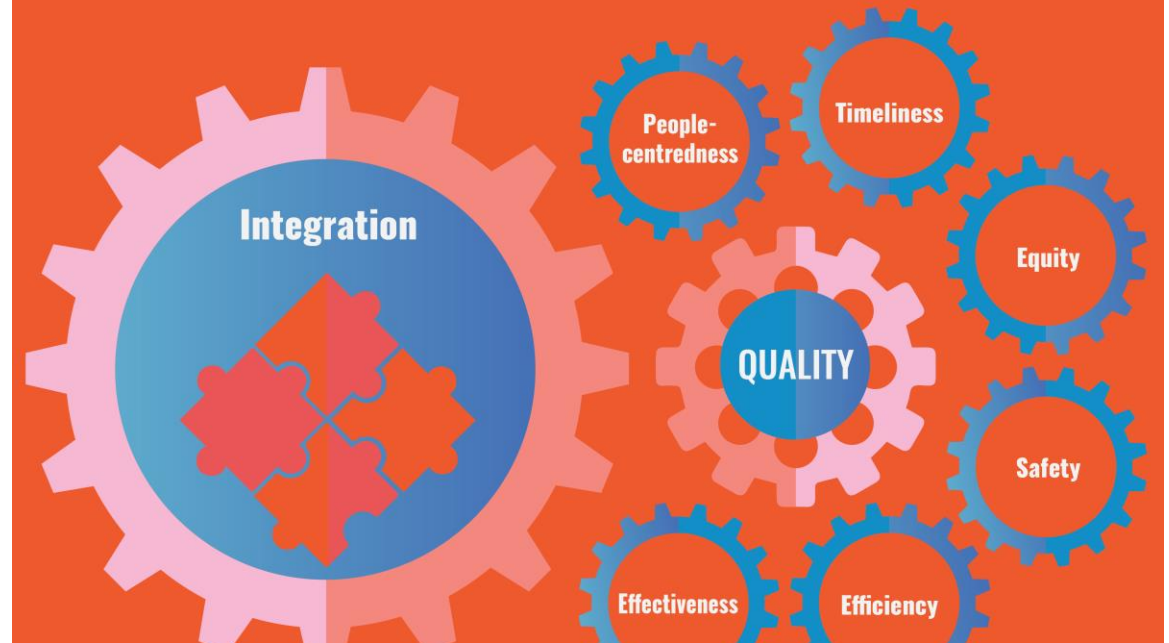
واحد و هو امر اني لعدنيا ← مامفخليه كل شوي
راجع على القلبية ورومته
الخبرات والخ...

* ربطه خطة علاجية بحيث كلتي يعمله يتقن الوقت
أو على الأقل تنسيق بينهم

والادوية فانيكونوا يعملوا interaction مع بعض

Quality health care is *integrated*.

If you have multiple chronic diseases, your medical care is coordinated across all the doctors and specialists who take care of you.



It is not possible to maximize all key components of quality healthcare services!

Quality Management



W & A →

- Definition: *"A planned, systematic approach to monitor, analyze, and improve organizational performance to enhance care quality."*

Juran's trilogy: three basic processes:

quality planning, quality control, and quality improvement.

- **1. Quality Planning** 🛠️ Establish standards, protocols, and objectives **Example:** Creating a hospital-wide hand hygiene policy based on WHO guidelines
- **2. Quality Control** 🔍 Identify gaps through data collection/audits **Example:** Monthly reviews of surgical site infection rates
- **3. Quality Improvement** 📈 do changes for better outcomes **Example:** Using PDSA cycles to reduce medication errors

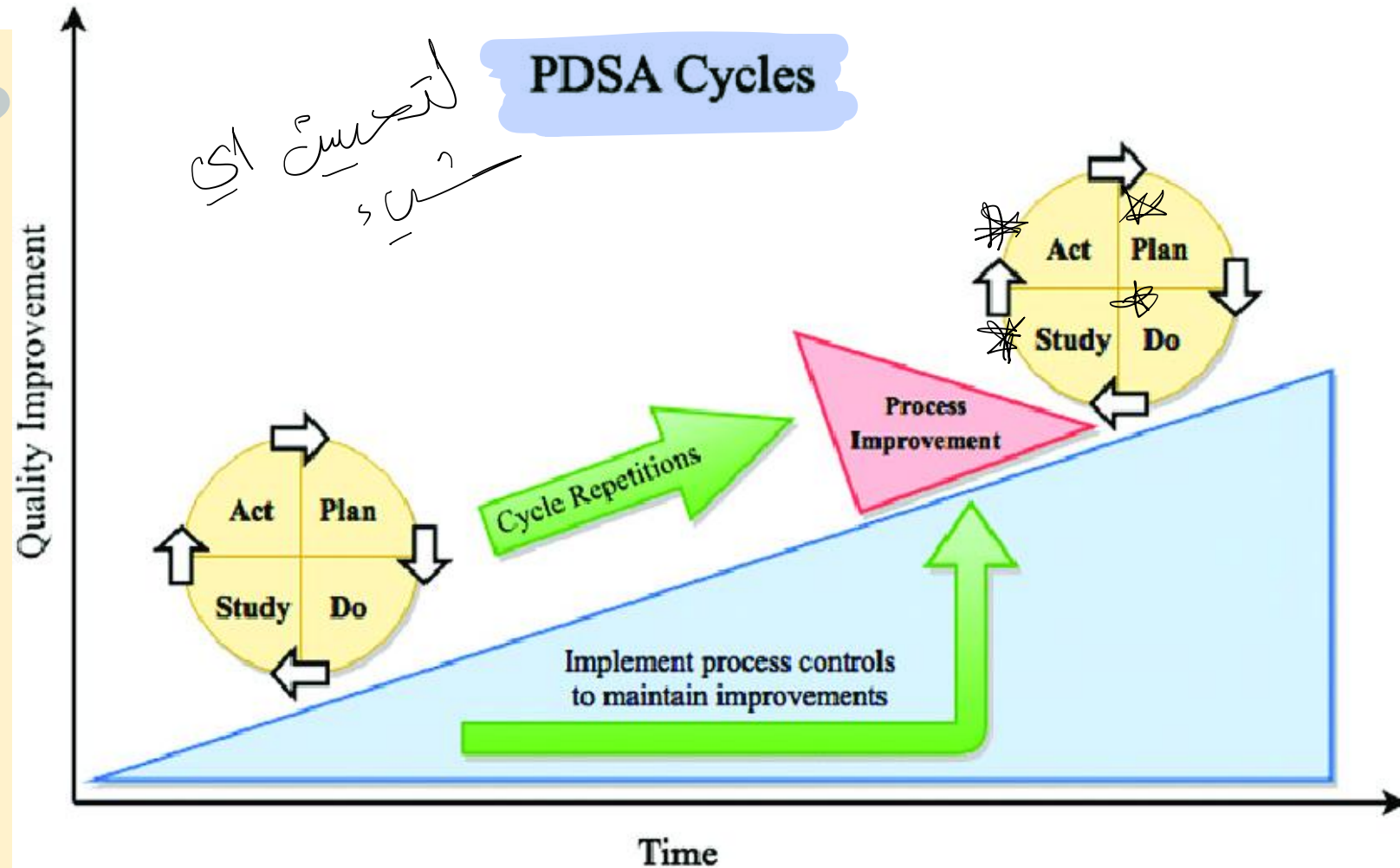
Quality improvement



- Quality improvement focus is measuring change, consisting of *“systematic and continuous actions that lead to measureable improvement in healthcare services and the health status of a targeted patient group.”* ✓
- It is important that healthcare organizations apply the principles of quality improvement in all aspects of clinical care.

The quality improvement cycle: (PDSA) cycles

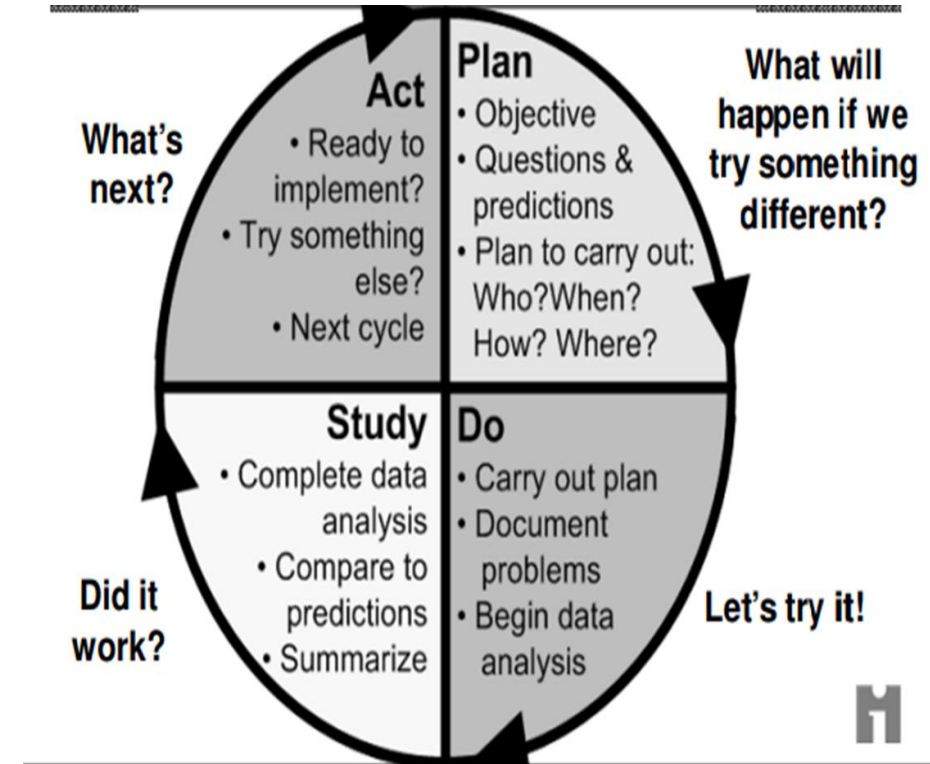
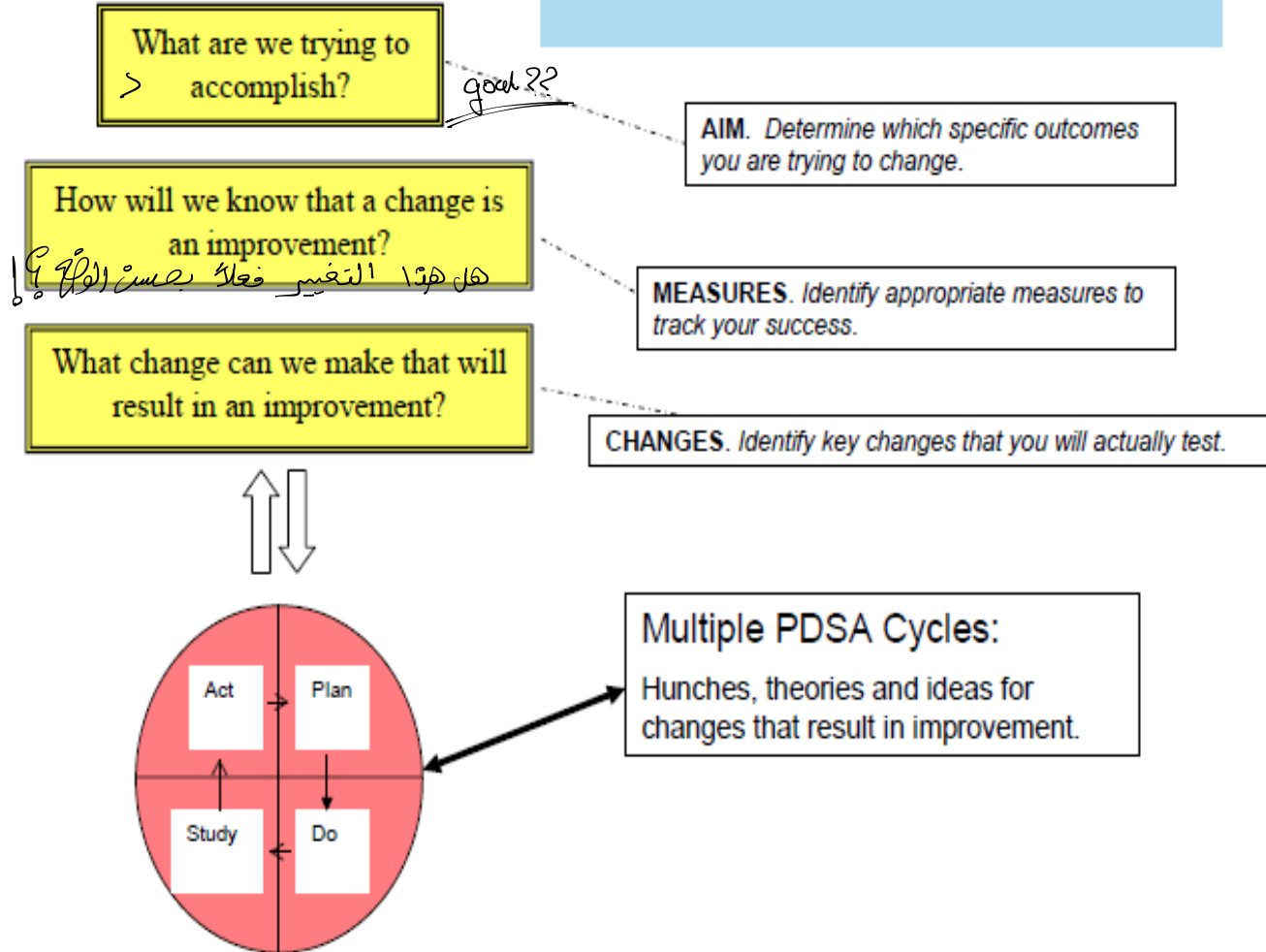
- One of the most widely used models is the Plan-Do-Study-Act (PDSA) Cycle, a systematic series of steps for the continual improvement of a product, service, or process. Deming (1982)
- Must be based on data and measurable
- Applies to all clinical and administrative processes
- Focuses on systems, not individuals



All improvement requires change, but not all change will result in an improvement

✓ *سليم*

THE MODEL FOR IMPROVEMENT*



The Model for Improvement

- **Three Core Questions:**

شئ الذي يدنا نحسنه بالخط

- **Aim:** *What are we trying to accomplish?*

- "Improve cancer services": poor statement
- *Good:* "Reduce bowel cancer treatment delays to <15 weeks by 2026"

- **Measurement:** *How will we know it's better?*

Measures can be:

Quality بكمسوال هذول

هل هو ممكن

- Readmission rates and outpatient appointment
- Patient experience scores
- Prescribing rates → كل دواء بيعني
- Number of patients diagnosed, treated.
- Treatment turnaround times TAT →

هوية زوال (Cost) على الحكومة
بوصلة (3) دواء مثلاً

ملاحظة يدخل
health out out comes
لعد فإطلاع
رضاء حولك
مذاكتر لمقتضى لأشعة
الز ... time
TAT ↓ → quality ↑

- **Changes:** *What can we test?*

- Look for Evidence from scientific literature and previous improvement programmes suggests that a small number of changes are most likely to result in improvement.
- Example:
- Booked admissions
- Multidisciplinary team reviews

the small steps ← المبرورين
↓
make a change

ممكناتنا كسعين (الايصال بـ)
dramatic change ←

Model for Improvement



Example:

Readmissions:

Total number of patients who unexpectedly
returned to same facility for additional
treatment for same condition

Total number of patients
who have been diagnosed
with that same condition within a specified period of time

- When patients must return again and again, it may be the result of misdiagnosis or poor treatment planning.

ملاحظة

مثلاً اجو 100 مريض على العيادة
وانعبرهم treatment وبعدين
رجع منهم 50 اولسا فاتحسنوا والعلاج مو منج
والاعراض لسا فيها
← هيد ال
Readmissions rate
↳ %50
when Readmissions rate ↑
Quality of care ↓
المفروض والمتوقع ما يرجعوا
unexpectedly

= Readmission Rate (%)

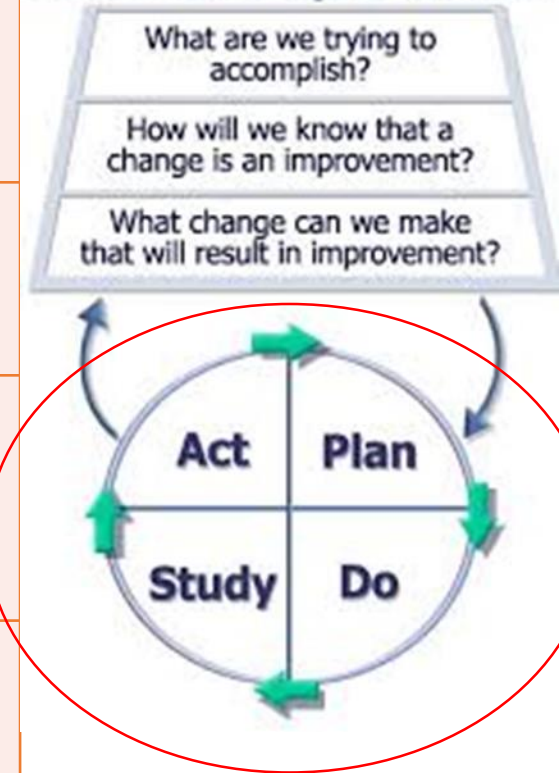
بعد الثلاث أسئلة مبدئية

Now start the PDSA cycle.

just example ← green

	Key Actions	Bowel Cancer Example <i>* poor prognosis</i>	Diabetes Management Example
PLAN (Design)	<ul style="list-style-type: none"> Define problem Set SMART goals Predict outcomes 	Goal: Reduce diagnosis-to-treatment time to <15 weeks	Goal: Increase HbA1c testing compliance from 60% to 85% in 6 months
DO (Test)	<ul style="list-style-type: none"> Small-scale trial Document process Train staff 	Test new referral pathway with 2 GP practices	Implement automated reminder system for 50 patients
STUDY (Analyze)	<ul style="list-style-type: none"> Compare data to predictions Identify barriers/successes 	<p>بعد مدّة</p> Result: 75% met 15-week target (vs. 80% goal)	Result: 78% completed testing (18% improvement)
ACT (Decide)	<ul style="list-style-type: none"> Standardize effective changes Revise failed attempts 	Make more pathway hospital-available + add weekend clinics	Expand reminders to all patients + add SMS option

Model for Improvement



PLAN (خططي) 🟥

1

Key Actions 🔑

- تعريف المشكلة:
حددي إيش المشكلة اللي تبين تحلينها.
- ضعي هدف SMART:
يعني يكون الهدف:
محدد، قابل للقياس، قابل للتحقيق، واقعي، ومحدد بزمان.
- توقعي النتيجة:
إيش تتوقعين يصير بعد ما تطبقي الحل؟
- مثال: 🧠
نقل وقت تشخيص سرطان القولون لأقل من 15 أسبوع.

DO (جربي) 🟦

2

Key Actions 🔑

- تجربة على نطاق صغير:
جربي الحل في مكان صغير أو مع عدد قليل من الناس (مثلاً فقط مع عيادتين).
- وثقي الخطوات:
سجلي كل شي صار، عشان تقدرين ترجعين له لاحقاً.
- تدريب الفريق:
لازم الكل يعرف إيش المطلوب ويكون مـ 📌.

STUDY (قيمي) 🟩

3

Key Actions 🔑

- قارني النتائج بالتوقعات:
شوفي هل النتيجة اللي حصلت عليها قريبة من اللي كنت تتوقعينها؟
- حددي المشاكل أو النجاحات:
إيش كان ممتاز؟
إيش اللي عرقل النجاح؟
- مثال: 🧠
النتيجة كانت 75%، لكن الهدف كان 80%.

ACT (طبقي / قرري) 🟨

3

Key Actions 🔑

- ثبتي الحل إذا نجح:
خليه رسمي وطبقه على مستوى أكبر.
- عدلي إذا فشل:
غيري الخطة وابدئي دورة جديدة.
- مثال: 🧠
وسعوا النموذج لكل المستشفى وزادوا أيام العيادة.

التسريع
مفهوم

- There may be several PDSA cycles running sequentially, or simultaneously.

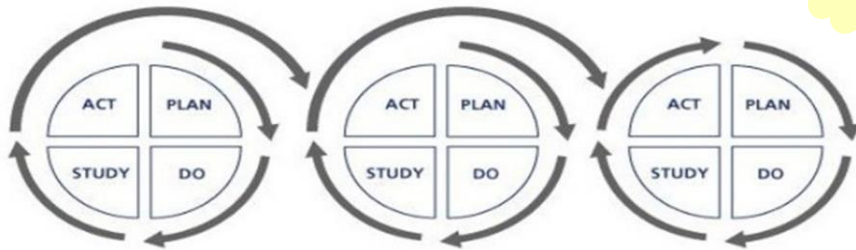
* **Sequential cycles:** *تتاليّة*

- One change tested at a time *بمحاولة واحدة ورا واحدة*
- Each cycle builds on previous results
- Ideal for adjusting existing processes *تجديد عمليات موجودة*

• **Simultaneous cycles:** *في نفس الوقت*

For more complex, possibly involving several departments.

- Multiple changes tested at the same time.
- Requires coordination to track changes *رستغل على زكتر عدت شغل*
- Addresses systemic blocks *وع يعلنا بيقس الوقت*
- Faster than sequential cycles. *ع + **
- Involve higher risks (high Uncertainty) *risk ↑ **



It is possible that there may be several PDSA cycles running sequentially. Cycles are repeated as needed until the desired goal is achieved.



تجديد عمليات موجودة
بمحاولة واحدة ورا واحدة

*risk ↑ **
*uncertainty ↑ **

Types of Quality of Care Measures

- There are multiple approaches to measuring different aspects of quality.

Four ways:

- 1. Examining the structure of the setting in which care is provided,
- 2. Measuring the actual process of care,
- 3. Assessing the outcomes of care.
- 4. Patient Experience Measures.

المؤشرات بالبنية

what you do for patient
بالخط الدخاري مع المريض



Structure.....

Structure doesn't mean the real performance on the ground

بنية زمنية
tools
معدات

- Refers to the characteristics of the setting in which care takes place.
- Structure measures evaluate the infrastructure of health care settings.
- Structure measures provide essential information about a provider's ability and/or capacity to provide high-quality care, BUT they **cannot** measure the actual quality of the care received or whether the care improved patients' health.

Measures of the setting used might include characteristics of:

- Physical resources (facilities, equipment)
- Staff qualifications (board certifications, nurse-to-patient ratios)
- Organizational systems (EHR capabilities, accreditation status)

Does the ICU have 24/7 intensivist coverage?

هل يكون كل شيء موجود
يسر في تطبيقه
أو في تنسيقه بين الأقسام المختلفة

Process...

- They can refer to anything that is done between health care professional and a patient *What we do for patients.*

Measures:

- Adherence to clinical guidelines (e.g., % of diabetics receiving annual eye exams)
- Care coordination activities
- Patient-provider interactions (shared decision making)

Percentage of heart attack patients given beta-blockers within 24 hours

- Process measures give providers clear feedback to improve their performance.

health care providers ← هي التي يتم الـ process

Outcomes....

التي يتحققها المريض

- Outcomes refer to a patient's health status or change in health status (e.g., an improvement in symptoms) resulting from the medical care received. *What results we achieve*
- This includes ^① intended outcomes, such as the relief of pain and ^② unintended outcomes, such as complications.
- Clinical results (mortality rates, infection rates)
- Functional status, quality of life (mobility post-surgery)
- Patient-reported outcomes (pain reduction)

Outcomes depend on both care quality and patient factors

☆ تجربہ

Patient Experience Measures.....

- Patient experience measures provide feedback on patients' experiences of their care. *How care feels*
- Communication (listening, clear explanations)
- Emotional support
- Care accessibility (e.g. when emergency care needed)

☆ سہولتیں

"% of patients who 'strongly agree' their doctor treated them with respect"

☆ Positive patient experiences have a relationship to clinical quality: Patients with better care experiences are often more engaged in their care, more committed to treatment plans, and more receptive to medical advice.

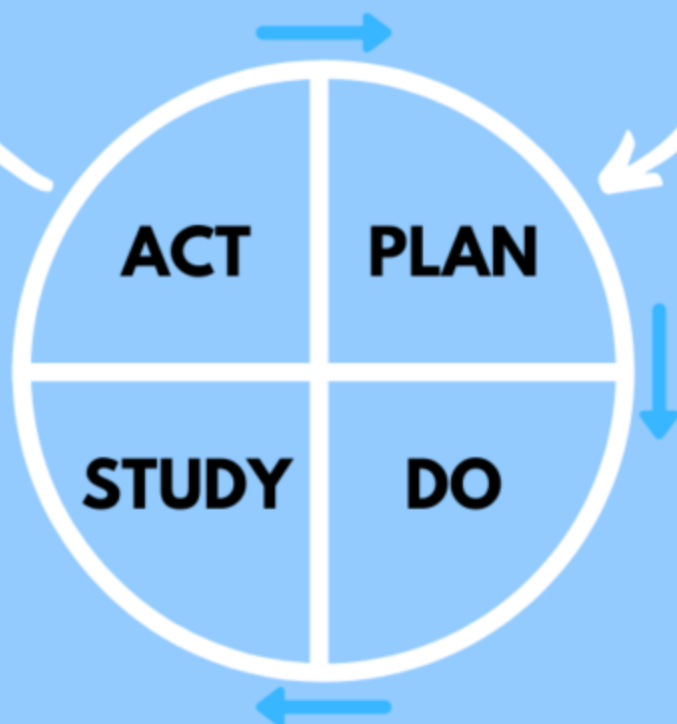
نتیجہ Outcomes ← patient experiences ال کل باتیں

IHI MODEL FOR IMPROVEMENT

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can be made that will result in an improvement?



STRUCTURE MEASURES

assess the static resources needed to improve processes and outcomes



ex. access to equipment, portable machines, & other necessary spaces



PROCESS MEASURES

give an indication of the parts and steps that you hypothesized would lead to improved outcomes



ex. number of times a fascia iliaca nerve block procedure is performed



OUTCOME MEASURES

assess system performance by measuring the result of healthcare to patients or the community



ex. delirium in patients with hip fractures

BALANCE MEASURES

reflect the potential unintended consequences that arise from a QI initiative



ex. reported adverse events related to nerve block or delay in patient consult and admission to hospital

27) The following are included in the pad of improvement model "How do we know if the change is an improvement" for the breast cancer screening service, EXCEPT?

Select one:

- a. We will improve breast cancer screening services
- b. We will need to obtain Data about the service
- c. We need to know the current performance of this service
- ☒ d. We need to stop measuring outcomes once quality of service improves
- e. We need to measure Patient experience

على الاغلب
D

!!

24) Perceptive quality?

Select one:

- ☒ a. Is the aspect of care which is perceived/judged by the recipient of care ✓
- b. The aspect of care which can be judged by the provider through comparative measures between the actual performance versus the standard one
- c. Can be defined objectively as compliance with, or adherence to standards
- d. Is the aspect of care which can be judged by the experienced practitioners.
- e. Quality perceived by the patient is generally based on the degree of care expressed by the physical environment.

!!

11) On applying the scientific approach (ROSA cycle) to quality, "act" involves?

Select one

- a. Begin data analysis → study
- b. Compare data analysis results to expectations
- ☒ c. Trying new methods.
- d. Examine delays → study
- e. Identify objectives → play (Analyze)

PLAN (Design)	<ul style="list-style-type: none">• Define problem• Set SMART goals• Predict outcomes
DO (Test)	<ul style="list-style-type: none">• Small-scale trial• Document process• Train staff
STUDY (Analyze)	<ul style="list-style-type: none">• Compare data to predictions• Identify barriers/successes
ACT (Decide)	<ul style="list-style-type: none">• Standardize effective changes• Revise failed attempts

50) Of the domains of Quality Health care: delivering health care which takes into account the preferences and aspirations of Individual service users?

Select one:

- ☒ a. Patient centered care
- b. Equitable
- c. Effective
- d. Efficient
- e. Accessible

✳️ علاج المريض وليس المرض

2) Patient centered care means all of the following, EXCEPT?

Select one:

- a. The patient is not the problem
- ☒ b. Achieving the smallest possible treatment burden on the patients' lives
- c. Moving from 'What's the matter to 'What matters to you
- d. Patient goal setting
- e. Focus on understanding the disease a patient is suffering from

48) An approach to quality improvement that involves commitment or all members or an organization to meeting the needs or its external and internal customers? Select one:

- a. Quality control
- b. Quality assurance
- c. Quality improvement
- d. Total quality management
- e. Continuous quality improvement

?? مايقدر
مراجعة

27) Structure?

Select one:

- a. Denotes what is actually done in giving and receiving care
- b. Denotes the attributes of the settings in which care occurs
- c. Denotes the effects of care on the health status of patients and populations.
- d. It includes the patient's activities in seeking care
- e. It includes improvements in the patient's knowledge and salutary changes in the patients behavior

36) All applies to 'Quality of health care' and its justification except? Select one:

- a. Is a key component of the right to health.
- b. Even where health systems are well developed and resourced. there is clear evidence that quality remains a serious concern.
- c. Where health systems - particularly in developing countries - need to optimize resource use and shrink population coverage.
- d. With wide variation in standards of health-care delivery within and between healthcare systems.
- e. The process of improvement and scaling up needs to be based on sound local strategies for quality.

شروط؟؟

C+D

34) Which type of quality measures examines the ownership of the health center in which care takes place?

Select one:

- a. Structure
- b. Process
- c. Outcome
- d. Patients' experience
- e. Structure and process

الحمد لله

Done by: NOOR Mahmood

• **THANK YOU**