

UNDER THE AUSPICES OF H.E. **ABDEL FATTAH EL-SISI** PRESIDENT OF THE ARAB REPUBLIC OF EGYPT

Value based Healthcare innovative-integrated Model of Care

Sherif Kamal

Endorsed by







03 - 06 JUNE 2024 EGYPT INTERNATIONAL EXHIBITION CENTER - EIEC, CAIRO - EGYPT. Organized by









- How many patients received phenytoin?
- How many patients reached the target?
- How many patients are controlled?

Achievement (%)

of patients with diabetes where HbA1c is 7 or less in previous 15 months



JU

AFRICA HEALTH ExCon Your Gate To Innovation and Trade

Why Value ? Healthcare Spending vs GDP



We get less than we pay for...



% of US

population

US life expectancy does not compare favorably with other OECD countries due partly to variations in outcomes









"Price is what you pay – Value is what you get" Warren Buffett





Transformation from Volume to value





What's so bad about a system where revenues are driven by volume?





What's so bad about a system where revenues are driven by volume?

Costly ("the more you do, the more you make...")

Wasteful

No incentives for quality or safety

Encourages more interventions, which increases risk

No incentives for efficiency







Value = Benefits

Costs





Value defined as the health outcomes achieved per dollar spent

Value = (Outcomes + patient experience) Cost (direct + indirect costs of the intervention)

VBHC = <u>Healthcare that matters to the patient</u> Costs along the entire cycle of care

Value-based Procurement (VBP)

 Value-based Procurement, in line with the VBHC approach, considers the price of a product, or a service, the outcomes for patients, the reduced total cost of care, and the benefits for HCPs, hospitals, the health care system and the society

VBP = Outcomes for patients and other stakeholders Total costs (incl. care delivery)



Value sustainability and Green



• Mortimer et al. included environmental impacts in the definition of value, which is central to QM methods in the healthcare setting:

Value of Care = $\left(\frac{\text{Outcomes for patients and populations}}{\text{Environmental} + \text{Social} + \text{Financial Impacts}}\right)$



Sustainability in Pharmacy Recommendation Medication Optimization and Rational use

 Activities such as medicine optimization could save 202 tonnes of greenhouse gas emissions, 0.3 million m 3 of fresh water and 24 tonnes of waste per 100,000 population

https://www.cshp.ca/docs/pdfs/CSHP-Sustainability-in-Pharmacy-Recommendations/1/pdf/AFRICAHEALTHEXCON.COM

Green Inhaler Prescrption







https://www.sussexccgs.nhs.uk/wp-content/uploads/2021/08/East-Sussex-Green-Inhaler-Guide_Final_2.pdf



The Value Equation in Pediatric Health Care FRICA [Quality] [Service] Access [Cost] Robert W. Steele, MD, MBA https://www.linkedin.com/pulse/value-equation-pediatric-health-care-robert-steele-md-mba/

WWW.AFRICAHEALTHEXCON.COM





gahar.gov.eg -

WWW.AFRICAHEALTHEXCON.COM

The Drivers of VBP: The "Quadruple Aim"



Key elements of VBHC



- collection and interpretation of relevant data to drive quality improvement and appropriateness of care
- focus on a continuum of care from prevention through to complications
- awareness of the financial drivers of the cost of care and a recognition that meaningful outcomes of care are those that are important to patients.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10360372/



- The term value-based healthcare (VBHC) describes an approach to the organization and delivery of care that emphasizes reducing the cost of care while improving outcomes.
- This involves increased investment earlier in the care pathway e.g., in the prevention, timely diagnosis, and screening for complications in order to maximize the overall impact of care.



The question

Value = Benefits

Costs

- how to significantly improve value?
- How do we actually organize ourselves, measure ourselves, and get paid in ways that support, encourage, and enable the dramatic improvement of value?

The answer



- The answer includes the following 6 fundamental strategic agendas:
- 1. Reorganize Care Around Patient Conditions
- 2. Measure Outcomes and Costs for Every Patient.
- 3. Move to Bundled Payments.
- 4. Integrate Multisite Care Delivery.
- 5. Expand Geographic Reach in Areas of Excellence.
- 6. Build an Enabling Information Technology Platform.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4570069/

Pathways:



- Multidisciplinary oncology care pathways are essential components of value-based care.
- Oncology pathways are evidenced-based, standardized yet personalized, clinical decision support tools integrated into the electronic medical record to facilitate treatment selection at the point of care.
- These pathways ensure that clinicians are empowered to deliver the highest quality care.



Precision Medication Management :

- Comprehensive genomic profiling and biomarker testing to identify patients who might be eligible for a novel therapeutic are essential components of any value-based care program.
- The ability to seamlessly and efficiently deliver therapeutic options to physician partners so patients have access innovative care

- 1. Selection (supply chain/Formulary Mx)
- 2. Storage (transport)
- 3. Ordering (order review)
- 4. Transcription
- 5. Dispensing
- 6. IV admixture/Nonsterile preparation (Extemporaneous)
- 7. Clinical Pharmacy Round
- 8. Monitoring /Decision support and performance improvement



Clinical Trial Research:



- Access to clinical trials allows patients to receive novel therapies ahead of their time.
- In addition to bringing innovation to patients, clinical trial enrollment also empowers value-based care by offering more targeted therapies, which may lead to improved outcomes compared to standard therapy choices.

Palliative and Supportive Care:



- By focusing on relieving symptoms and stress for a serious illness, palliative care improves a patient's ability to go through medical treatments while also helping define what is most important to a patient throughout their treatment.
- Palliative care providers across the network meet regularly to discuss best practices and ways to improve access to palliative services for patients.

• **Patient Centered:** The care is easily accessible and provided by staff that communicate well, demonstrate knowledge and technical proficiency, and take enough time to address the needs of the client; (http://forces4quality.org/node/6805)

Clinically Effective: The care is effective in achieving individual outcomes that matter to clients and system-wide outcomes that matter to payors and the community;

Cost Effective: The care is more costeffective than alternatives that may have been selected because of the treatment selected and/or because waste (excess costs) has been removed from the work processes.

Reduction in inappropriate care and widespread use of high value care is synonymous with achieving the triple aim of better care, better health and better cost.



and Trade

Clinically Effective

High

Consumer

Value

Cost Effective

http://azpaymentreform.weebly.com/value-based-purchasing-basics.html

Call to Actio

value agenda

- The original "value agenda" included six specific sub-strategies (<u>Porter and</u> <u>Lee, 2013</u>).
- The World Economic Forum updated the framework in 2017 based on practical experiences (WEF, 2017).
- The value equation remained, and to it were added principles, enablers, and policy less prescriptive than the original agenda.
- Value is defined as the health outcomes that matter to patients relative to the cost of achieving those outcomes (<u>Porter and Teisberg, 2006</u>).



Organizing Care Around Patient Medical Conditions <u>Migraine Care in Germany</u>



Source: Porter, Michael E., Clemens Guth, and Elisa Dannemiller, The West German Headache Center: Integrated Migraine Care, Harvard Business School Case 9-707-559, September 13, 207WW.AFRICAHEALTHEXCON.COM

AFRICA HEALTH ExCon

Integrating Across the Cycle of Care

Breast Cancer



	Advice on self	Counseling patient	Explaining patient	Counseling on the	Counseling on	Counseling on long
AND	Screening Consultations on risk factors	and family on the diagnostic process and the diagnosis	treatment options/ shared decision making • Patient and family psychological counseling	treatment process • Education on managing side effects and avoiding complications • Achieving compliance	rehabilitation options, process • Achieving compliance • Psychological counseling	 erm risk management Achieving compliance
MEASURING	Self examsMammograms	 Mammograms Ultrasound MRI Labs (CBC, etc.) Biopsy BRACA 1, 2 CT Bone Scans 	• Labs	Procedure-specific measurements	 Range of movement Side effects measurement 	 MRI, CT Recurring mammograms (every six months for the first 3 years)
ACCESSING THE PATIENT	Office visitsMammography unitLab visits	 Office visits Lab visits High risk clinic visits 	 Office visits Hospital visits Lab visits 	 Hospital stays Visits to outpatient radiation or chemo- therapy units Pharmacy visits 	 Office visits Rehabilitation facility visits Pharmacy visits 	 Office visits Lab visits Mammographic labs and imaging center visits
	MONITORING/ PREVENTING	DIAGNOSING	PREPARING	INTERVENING	RECOVERING/ REHABING	MONITORING/ MANAGING
	MONITORING/ PREVENTING Medical history Control of risk factors (obesity, high fat diet) Genetic screening Clinical exams Monitoring for lumps 	 DIAGNOSING Medical history Determining the specific nature of the disease (mammograms, pathology, biopsy results) Genetic evaluation Labs 	 PREPARING Choosing a treatment plan Surgery prep (anesthetic risk assessment, EKG) Plastic or oncoplastic surgery evaluation Neo-adjuvant chemotherapy 	INTERVENING Surgery (breast preservation or mastectomy, oncoplastic alternative) Adjuvant therapies (hormonal medication, radiation, and/or chemotherapy) 	RECOVERING/ REHABING In-hospital and outpatient wound healing Treatment of side effects (e.g. skin damage, cardiac complications, nausea, lymphedema and chronic fatigue) Physical therapy	MONITORING/ MANAGING Periodic mammography Other imaging Follow-up clinical exams Treatment for any continued or later onset side effects or complications



Mapping Resource Utilization MD Anderson Cancer Center – New Patient Visit

AFRICA HEALTH **Registration and** Plan of Care Plan of Care ExCon Verification **Clinician Visit** Discussion Scheduling Intake Your Gate To Innovation and Trade **Receptionist, Patient Access** MD, mid-level provider, RN/LVN, MD, mid-level Patient Service Nurse, Coordinator Specialist, Interpreter medical assistant, patient provider, patient service Receptionist service coordinator, RN coordinator Patient Initiate patient Review plan of Verify patient Assess patient; Schedule tests Check in patient; arrives workup; review care; introduce information; assemble Discuss plan of and consults: communicate patient history; team; review complete paperwork; place communicate care arrival schedule for return conduct physical consent forms patient in room MD schedule to patient RCPT exam visit PAS RN PSC: 2 40 MLP 45 30 15 5 RN 20 Clean room; Interpretor N complete N needed? aryngoscopy Scheduled for Ν 95% 10% paperwork; check needed? RCPT same day? 10% email and PSC N voicemail for 90-95% updates or changes to plan of 90% Pt discharged 5% care RN 10 90% Perform Add language laryngoscopy ranslation time for MD, MA, PSC each process 10 INT, RCPT Enter next process Changes to Plan of Care' 5-10% Notify patient of changes RCPT: Receptionist RN MD: Medical Doctor, PHDB: Patient History DataBase 30 INT: Interpreter MA: Medical Assistant PAS: Patient Access Specialist **PSC: Patient Service Coordinator** Time Decision point (min) RN: Registered Nurse Pt: Patient, outside of process

Copyright © Michael Porter 2011



Degree of Care Provider Integration and Accountability

https://www.linkedin.com/pulse/value-perspective-trend-3-healthcare-payers-2016-zayed-khan/

WWW.AFRICAHEALTHEXCON.COM







ISSN: 2254-609X

Journal of Biomedical Sciences





Figure 4: Daily dose of metformin *Vs*. metformin concentration in urine (ug/ml).



ISSN: 2254-609X

Journal of Biomedical Sciences





Figure 5: "weight" variable Vs. Metformin concentration in plasma (ng/ml).

Y





Figure 6: "Exercise frequency" variable *vs*. metformin concentration in plasma.



Examples of Common Quality Domains and Metrics Used in VBHC

Domains	Sample Metrics
Reducing overall health care costs (e.g., unnecessary or avoidable ED utilization and/or hospitalization/readmissions)	% reduction in unnecessary or avoidable ED utilization and/or hospitalization
Improving health outcomes/specific clinical quality measures	Improvements demonstrated in hemoglobin A1C, hypertension or depression
Increasing access to care	# days maximum between initial referral and appointment time
Patient satisfaction	% of patients indicate they are satisfied or very satisfied
Increasing safety and reducing risk	% of patients screened for suicide risk, SBIRT or risk of falls/home safety

sherif.kamal@gahc.gov.eg
Sherifkam@gmail.com
+201001704363





WWW.AFRICAHEALTHEXCON.COM



Scientific Conference POWERED BY MANAGED BY











Sherif Kamal Chairman Consultant -Medication Managment and Pharmacy Affairs Egypt Health Authority

Organized by

