

Prof. Nasser A. N. Alzerwi

Health & Higher-Education Executive • Professor of Surgery •
Consultant General & HPB Surgeon • MSc Healthcare Management
• Creator of the SHIFA EMR & the EHF Model of Care

EXECUTIVE & IMPLEMENTER

SHIFA EMR

EHF MODEL OF CARE

QUADRUPLE THREAT

BOUNDARY-SPANNER

HEALTH & EDUCATION TRANSFORMATION

Saudi national • Age 45
Riyadh, Kingdom of Saudi Arabia
+966 50 670 4571
general_surgeon1@yahoo.com
n.alzerwi@mu.edu.sa
ORCID 0000-0002-4877-2152



EXECUTIVE PROFILE

An executive who has built, digitised and run health and education institutions

Twenty years from top-of-class medical graduate to Professor of Surgery, former Dean, former Supervisor-General of Academic Clinical Health Institutes and former UEI Chief Executive Officer (CEO). I am an **executive, leader, implementer and manager** in three sectors — **health services, health-professions education and higher education** — where universities, providers, payers and regulators meet.

I originated and led **SHIFA**, a sovereign electronic medical record built by the University's Health Facilities Sector and Deanship of IT. It unifies medical, dental, laboratory, radiology and emergency care, integrates with NPHIES and national regulators, migrated 100% of historical data and is registered as **5% of a new university investment hospital's assets**. I created the **Eudaimonic Holistic Flourishing (EHF)** model of care, designed to improve quality, access and cost together.

At Majmaah University I pioneered the separation of clinical institutions from health colleges, a **PPP hospital pathway** and **insurance-ready, fee-for-service** care; led a dental college to accreditation; and represented the University before **11 national health bodies and initiatives** — aiming for the best balance in the **golden triangle of quality, access and cost** (adapted from Kissick's 1994 iron triangle).

SEEKING

Executive roles in public and private health systems, hospital groups, universities and health-tech — CEO/COO and transformation, model-of-care and digital-health leadership, health financing & insurance, education reform, SDG strategy — and a **faculty position** (Professor of Surgery & education leadership) in a promising **nascent** or an **established, prestigious college of medicine**.



The ten domains I integrate — each evidenced in the pages that follow

1,748

Google Scholar citations • h-index 17 • i10-index 29

3

sectors led as an executive: health services, health education, higher education

5%

SHIFA's registered share of the new investment hospital's assets

59

publications, incl. 11 group-collaborator papers (Lancet family, BJS, Anaesthesia)

11

national health bodies & initiatives where I represented the University

55

free dental teaching clinics in the expanded network (2025)

44

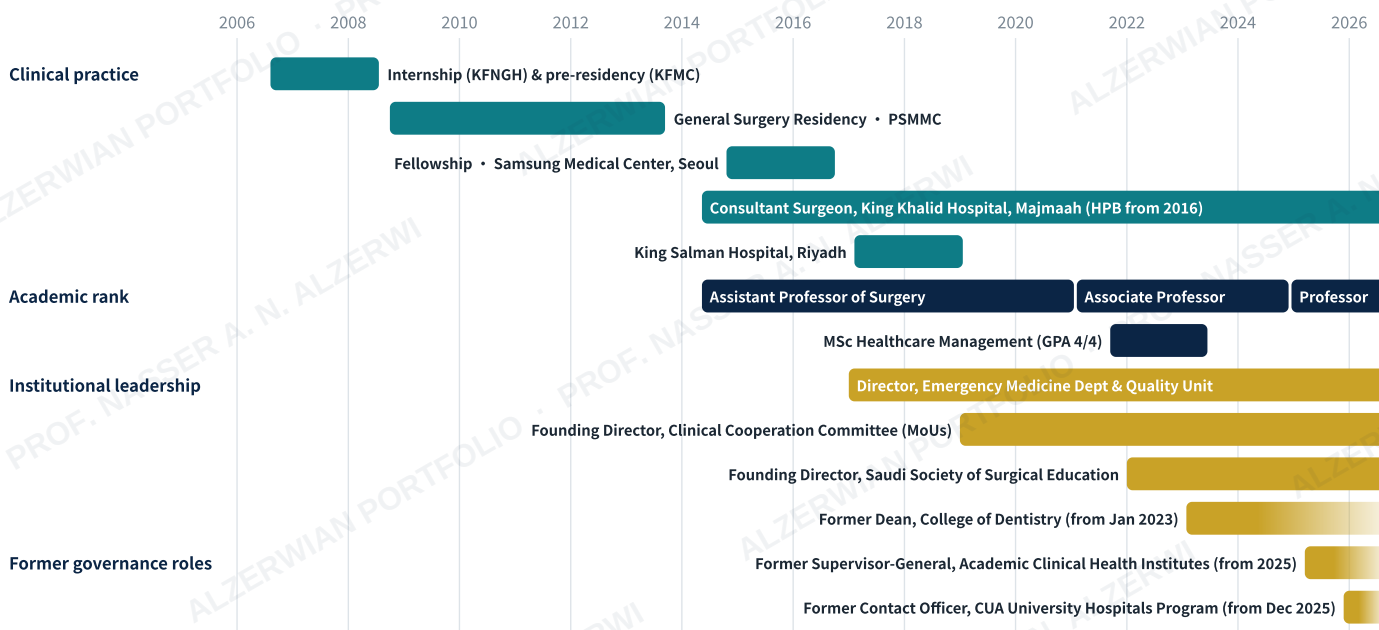
projects in the excellence portfolio I led as UEI CEO, on the national UEI framework

4/4

GPA, MSc Healthcare Management (1st-class honours)

Two decades, four parallel tracks

Clinical excellence, academic rank, institutional leadership and national health-system governance have advanced together — each track feeding the next.



LEADERSHIP RECORD

- **Professor of Surgery**, Majmaah University (2024–)
- Consultant Surgeon, King Khalid Hospital (2014–; HPB from 2016)
- Former **Supervisor-General**, Academic Clinical Health Institutes (from 2025)
- Former **UEI Chief Executive Officer (CEO)**, Majmaah University
- Former **Contact Officer**, CUA University Hospitals Program
- Former **Presidential Advisor**, CUA University Excellence Initiative
- **CUA SG's Representative**, Inaya Medical Colleges Board
- Represented the University before **11 national health bodies & initiatives**

FOUNDING & DIRECTING ROLES

- Former Dean (from Jan 2023) and Council Chair, College of Dentistry
- Founding Director, Clinical Cooperation Committee (2019–)
- Founding Director, Saudi Society of Surgical Education (2022–)
- Director, Emergency Medicine Department (2017–) & EM Module Committee
- Director, Quality & Development Unit, Dept. of Surgery (2018–)
- Co-founder, first Surgery Module design committee (2014)
- Founding-committee member, accredited General Surgery Residency, KKH

LEADERSHIP SIGNATURE

Builder. Founding director of the Saudi Society of Surgical Education and the Clinical Cooperation Committee; creator of the College of Dentistry's first faculty-development programme; founding-committee member of KKH's accredited surgery residency.

Integrator. Bridges medicine, dentistry, management, informatics and sustainability; translates between clinicians, academics, financiers and regulators.

Reformer. Moves from diagnosis (research) to design (policy) to delivery (operations) — and measures the result.

Philosopher-executive. Originator of RSME, Neo-Managerialism (post-NPM sense of Terry's 1998 term), Neo-Re-Flexnerization, Neo-Re-Halstedization, Neo-Re-Firmization, EHF, Mourning the Morning Report, Tenantization of Medical Colleges, De-Mythologization Re-Enchantment, Sakina Sedation and Neo-Re-Homeostatization.

Strategic

Institutional strategy, governance redesign, national policy representation, SDG integration frameworks, partnership & investment models.

Operational

Running facilities, clinics & mass-gathering health services; accreditation; quality units; hospital-project monitoring; e-health integration.

Scholarly

Evidence generation in surgery, systems, education & translational science — the engine behind every reform I led.

Executive, leader, implementer and manager — in three sectors

I have set direction, built coalitions, delivered systems and run operations across health services, health education and higher education.

EXECUTIVE

Led strategy and delivery as former UEI CEO and Supervisor-General, overseeing clinical facilities.

LEADER

Founded a clinical-cooperation committee and a surgical-education society; aligned clinical and IT teams.

IMPLEMENTER

SHIFA with the Deanship of IT, 100% historical-data migration; accreditation; 44-project portfolio.

MANAGER

Oversaw university clinics and the Hajj convoy; directs Emergency Medicine and a quality unit.

The delivery ledger

Initiative	My executive role	Delivered, or where it stands
SHIFA unified EMR	Originator & executive sponsor	Unified record, 5 service lines; 100% of historical data migrated; 5% of investment-hospital assets
Academic Clinical Health Institutes	Former Supervisor-General (2025)	Led apart from the colleges; insurance readiness and FFS designed; Hajj convoy and dental-clinic expansion overseen
EHF model of care	Originator	Model of care, designed to align with SHIFA, the free clinics and WorkWell Academic (proposed)
University Excellence Initiative	Former UEI CEO	Detailed transformation plan: target states, charters, KPI cascades, delivery spine
Excellence portfolio & internal market	Lead, with the Transformation PMO	44 projects in 10 domains on the national UEI framework; internal-market proposal
University investment hospital (PPP)	Proponent & negotiator	PPP pathway proposed; MoU with Dr. Sulaiman Al Habib Medical Group signed (2022); cluster negotiations under way
College of Dentistry	Former Dean (from Jan 2023)	ETEC accreditation (2025); college's first FDP; 55-clinic free teaching network overseen as Supervisor-General (2025)
Surgical morning report	Department of Surgery leadership	Revived the morning report in my Department of Surgery (MORNING framework)
National roles	Representative & advisor	Inaya board (current); former: 11 national health bodies & initiatives, CUA UEI advisor, University Hospitals Program; led MU input to VNR 2026

Author of a foresight analysis, **Trends and Scenarios to 2035** (health, health education, higher education; KSA and global), Oct 2026.

Why employers hire me — value by employer

Public health clusters & ministries

EHF for the six systems of care; SHIFA-type records; Beyond Ownership academic partnerships

Private hospital groups & investors

NPHIES-linked records; PPP pathway design; EHF as a differentiator; proposed WorkWell retention model

Universities, public & private

UEI transformation delivery; excellence frameworks; internal markets; board governance

Colleges of medicine

Builder or transformer; ISNAD Firms and a revived morning report; curriculum, AI

Digital health & health-tech

SHIFA from concept to licensing roadmap: clinical product, interoperability, asset strategy

Regulators, payers & agencies

Tenantization & Beyond Ownership policy; insurance; national curricula; SDGs

Days 1–30

Listen & diagnose: golden-triangle baseline of quality, access, cost, equity and people.

Days 31–60

Design the target state: priorities, owners, governance and business model.

Days 61–90

Deliver early wins in flow, revenue cycle, data or experience; publish a scorecard.

Day 100

Institutionalise: charters, KPIs, review rhythm and a funded 3-year roadmap.

SHIFA and Eudaimonic Holistic Flourishing

Two innovations I created: SHIFA, a sovereign digital backbone for care, teaching and research (in operation), and the EHF model of care, designed to improve quality, access and cost together.

INNOVATION 1 • DIGITAL HEALTH

SHIFA: the sovereign smart electronic medical record

Smart Health Information & File Administration

My role: originator and executive sponsor; conceived and championed SHIFA at Majmaah University and led it as Supervisor-General. Built by the University's Health Facilities Sector together with its Deanship of IT, entirely by national and institutional talent, and owned fully by the University.

Clinical services	Medical • Dental • Laboratory • Radiology • Emergency
Unified record	One smart file • automated appointments & documents
National integration	Rasd • NPHIES • Weqaya • SFDA
Data & knowledge	Research database • real teaching cases
Governance	Strict privacy • secure access • university-owned IP

100%

historical data migrated

5%

of investment-hospital assets

5

clinical service lines

4

national links

FINANCIAL EFFICIENCY

- Commercial benchmark (TrakCare quotation via CUA): ≈ SAR 0.5M a year for centres and clinics + SAR 3M a year for a university hospital — up to **≈ SAR 3.5M a year in licence fees not incurred** (derived; excludes in-house costs; the hospital component applies once a university hospital operates).
- Registered as an approved asset: **5% of the new university investment hospital's assets**.
- ROTA = (operating & investment returns + realised savings) ÷ capital value of system assets.

ROADMAP

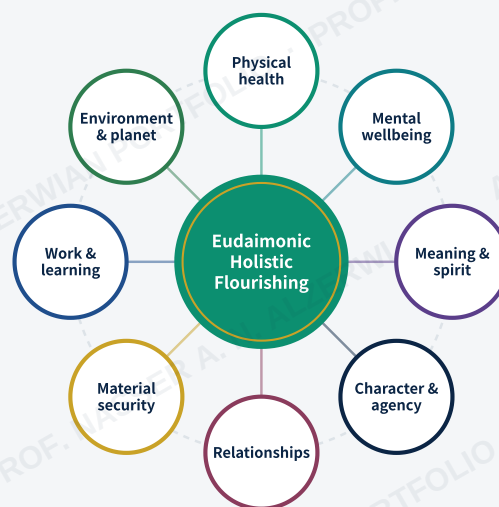
① Build & data integration (all historical data migrated) → ② operation & support → ③ external licensing to public and private providers → ④ revenue generation: technology staff from cost centres to income units.

INNOVATION 2 • MODEL OF CARE

Eudaimonic Holistic Flourishing (EHF)

From treating disease to enabling flourishing

Definition: care organised around a person's capacity to live a good, meaningful and capable life across eight domains — delivered by integrated, data-enabled, community-anchored services that also enable the flourishing of those who give care.



Golden triangle

EHF design mechanism

Quality ↑	Whole-person assessment; integrated medical–dental–diagnostic care on one record; outcomes that matter
Access ↑	Keeping-well services; free dental teaching clinics; community and mass-gathering outreach
Cost ↓	The flourishing dividend: adherence, fewer avoidable admissions, less duplication, lower staff turnover

DESIGNED TO ALIGN WITH

SHIFA's unified record • the free dental teaching clinics • the Hajj health convoy • WorkWell Academic (reciprocal flourishing of staff) • IPECP whole-person teams — and the six systems of the national Model of Care.

SHIFA × EHF

Infrastructure and philosophy designed for each other: SHIFA can give EHF one longitudinal record, flourishing indicators and NPHIES-linked value payment; EHF gives SHIFA a purpose beyond documentation. Constructs I coined or adapted (cf. Quadruple Aim, WELLBY, Positive Health): the **eudaimonic gap**, **reciprocal flourishing**, the **flourishing dividend** and **flourishing-adjusted value**.

Ten original theories — and the models that apply them

Each theory answers a real crisis I met as a surgeon, educator or executive; each is set out in full in the portfolio book with its genealogy, architecture, rivals, objections and falsifiable predictions.

Theory	Field	Core thesis	Status
Neo-Managerialism	Governance of health services, higher & health education	Public mission locked; market tools as instruments; keep both sectors' strengths, exclude both sectors' vices (term after Terry, 1998)	Design theory; related work: clinical institutes, internal-market proposal, PPP hospital pathway
Neo-Re-Flexnerization	Undergraduate medical education	Restore science and scholarship against the drift to "Oslerization"	Curriculum-reform agenda
Neo-Re-Halstedization	Surgical residency	Trust-earned, pyramidal ascent against the Egalitarian Rectangularization Model (Churchill's 1939 rectangular residency)	Conceptual model; AI-simulation framework (co-authored poster, 2026)
Eudaimonic Holistic Flourishing (EHF)	Model of care	Care organised around flourishing across eight domains; reciprocal flourishing of carers	Model of care, designed to align with SHIFA, the free clinics and WorkWell
Neo-Re-Firmization: the ISNAD Firm	Surgical care & training organisation	Continuity carried by a stable team, not an exhausted individual: 9 axioms, 6 indices	Pilot-ready; 5-year roadmap
Mourning the Morning Report	Surgical education	Productive mourning, not melancholia: the MORNING framework restores seven lost functions	Revived in my Department of Surgery
Tenantization of Medical Colleges (Academic Homelessness; Academic–Clinical De-coupling)	Clinical training capacity policy	Colleges move from owners to tenants; the Beyond Ownership framework secures governed, priced access through six instruments	National policy proposal (for CUA, HHC, Insurance Center)
De-Mythologization Re-Enchantment	Culture, myth and evidence in health, education, development & leadership	Test claims, recover kernels and functions, under six red lines against harm and pseudoscience	Method for culture-sensitive programmes
Sakīna Sedation (Husn al-Khātima Sedation Ethic; Graduated Mercy; Dhikr-Window Sedation)	Islamic bioethics & palliative care	Proportionate, lucidity-preserving sedation: tranquillity, not oblivion	Protocol proposal for scholarly review
Neo-Re-Homeostatization (Mīzān Theory; Evolution-Proof Affordance Therapy)	Health behaviour, evolutionary medicine & social determinants	Affordance design and team-based, evolution-proof therapy reset the set-point that sustains resistant pathogenic behaviours	Applied in my practice, department, EHF & SHIFA; pilot-ready

RSME

Rhizomatic Social Micro-entrepreneurial Innovations: change that spreads through networks.

PIPELINE MODEL

Intake aligned with national workforce need (co-authored, 2025).

WORKWELL ACADEMIC

AI-driven faculty workforce sustainability, with co-authors (CIFAL/UNITAR idea award 2025).

INTERNAL MARKET

Proposal: cost recovery through internal pricing, a development fund and incentive pool.

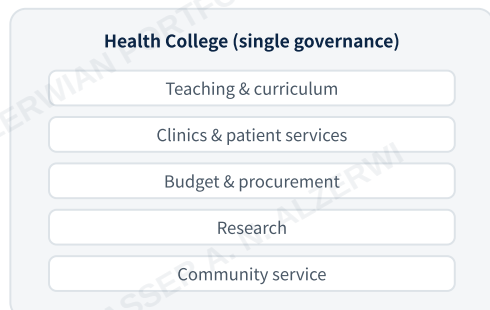
One logic

Protect professional and public value; use markets, management and technology as instruments; integrate across boundaries; recover what tradition got right and retire what it got wrong — and make every claim testable.

Re-architecting the academic health system

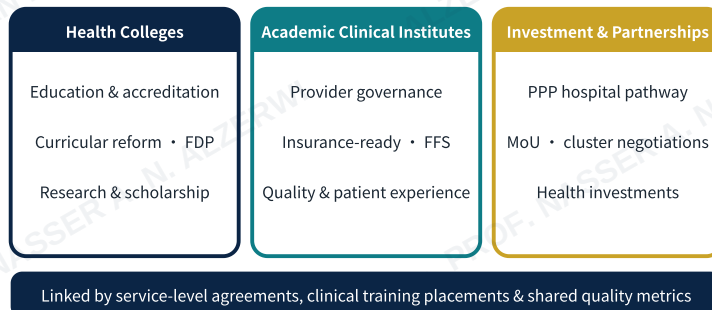
At Majmaah University I pioneered a governance shift that lets universities teach, heal and invest, each under its own accountability yet tightly linked. The proposals span governance, financing and partnerships.

LEGACY MODEL



REFORM

ACADEMIC HEALTH SYSTEM MODEL



1 · Separating clinical institutions from health colleges

Championed and designed the policy case for placing university health and treatment facilities under their own provider governance, distinct from the health colleges. The aim: colleges focus on education quality and accreditation, while facilities run as accountable providers with their own budgets, quality systems and training service-level agreements.

Operationalised while Supervisor-General of Academic Clinical Health Institutes — e.g., Majmaah University's 24/7 Hajj health convoy in the Holy Sites (June 2025) and the launch of the expanded Al-Zulfi dental teaching clinics (55 clinics, 3D panoramic imaging, central sterilisation, prosthetics lab — Dec 2025).

2 · PPP pathway for the university hospital

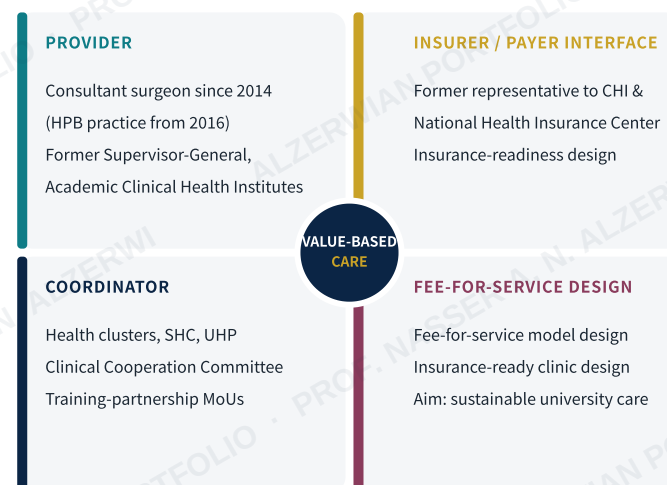
Championed a public-private-partnership pathway for the planned university investment hospital; monitors delivery through the Hospital Project Monitoring Committee and represented the University in the national **University Hospitals Program** (Council of Universities' Affairs (CUA)).

As founding director of the Clinical Cooperation Committee, negotiated and signed the MoU with **Dr. Sulaiman Al Habib Medical Group** (Feb 2022) and opened negotiations with the Armed Forces Health Services, King Abdulaziz Medical City (National Guard) and the First & Third Riyadh Health Clusters.

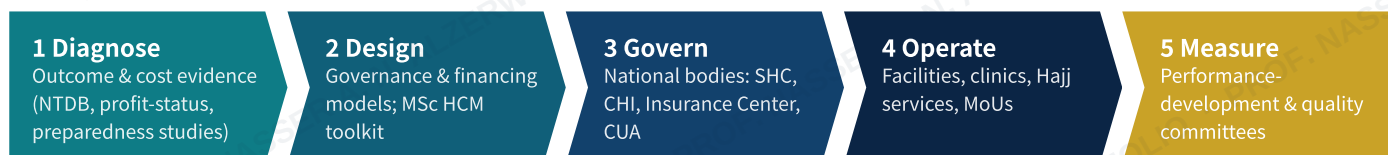
3 · Health-insurance & financing reform

Former University representative to the **Council of Health Insurance** and the **National Health Insurance Center**. Championed positioning university clinics as insurance-ready providers, with **fee-for-service** models designed to build a sustainable revenue line for education and quality.

THE FOUR SYSTEM ROLES I HAVE WORKED ACROSS

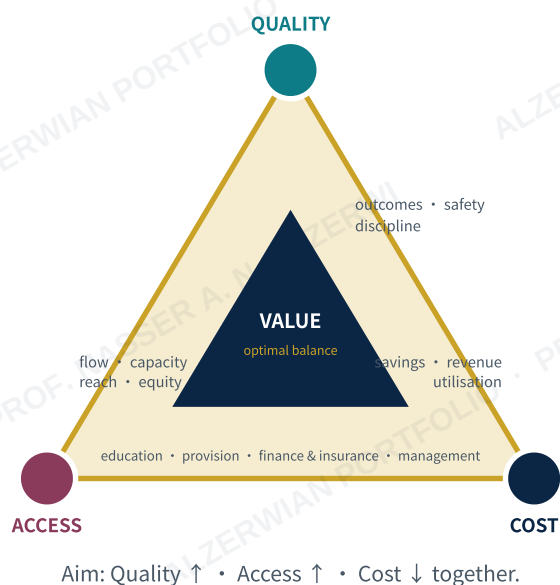


HOW I TAKE A REFORM FROM IDEA TO OPERATION



Balancing the golden triangle: quality, access and cost

Most systems trade one corner of Kissick's 1994 "iron triangle" for another. I reframe it as a golden triangle and aim to move all three corners at once, by redesigning governance, flows and money together.



LEVERS I APPLY — AND THE EFFECTS I TARGET

Discipline & governance

Accountability lines, performance standards, M&M-style audit.

→ **Consistent, auditable operations**

Clinical outcomes

Outcome monitoring, evidence-based pathways and the EHF model of care.

→ **Safer care; outcomes that matter**

Flow of service

Redesigned pathways; SHIFA automated appointments and one record.

→ **Shorter waits, higher throughput**

Financial flows

Separate cost centres for education vs. service.

→ **Predictable, traceable funding**

Revenue-cycle management

Financial and insurance transactions via NPHIES in SHIFA.

→ **Fewer leakages, faster collection**

Potential savings

SHIFA instead of recurring EMR licences; shared capacity.

→ **Lower unit cost of care & training**

Revenue options

Fee-for-service design, insurance readiness, PPP and private partners.

→ **Diversified, sustainable income**

Resource utilisation

Clinics, dental chairs and staff time used fully.

→ **More output from existing assets**

The triangle across the four domains I have led

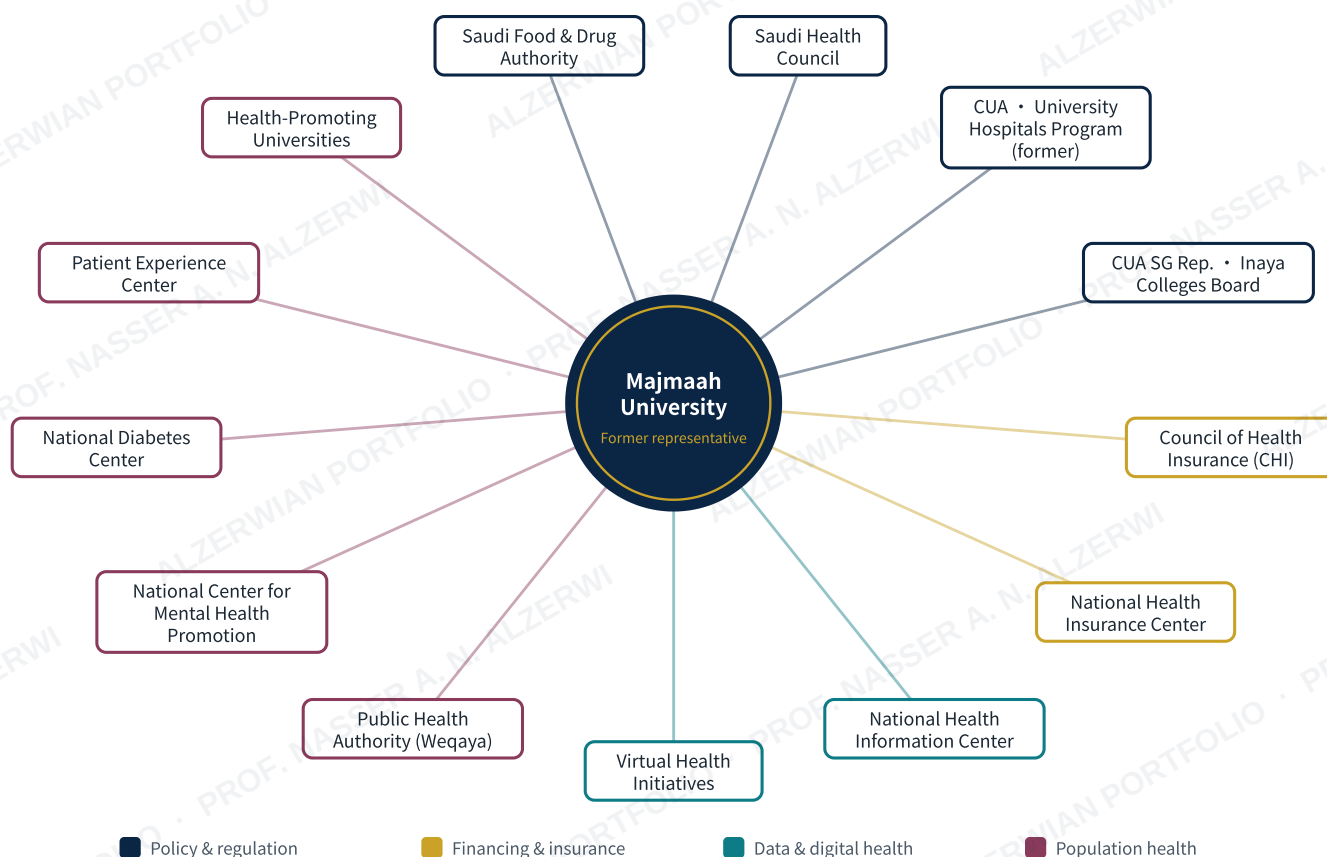
Domain	Quality	Access	Cost & sustainability
Health-professions education	ETEC programmatic accreditation; college's first FDP; assessment reform	55-clinic free dental teaching network; Pipeline Model (co-authored) aligning intake to workforce need	Shared training capacity: Al Habib MoU (2022), cluster talks; WorkWell Academic proposed to cut faculty turnover
Health provision	Clinical discipline, outcome audit; EHF whole-person outcomes (by design)	Service-flow redesign; Hajj 24/7 convoy; free dental teaching clinics	Better chair and clinic utilisation; the flourishing dividend (EHF aim)
Health finance & insurance	Former quality liaison with CHI and the National Health Insurance Center	Insurance readiness, designed to open university care to insured populations	Revenue-cycle options; fee-for-service design; alternative revenue
Health management & governance	Performance KPIs; quality units; complete history via SHIFA	SHIFA unified record across five service lines	SHIFA licence-free avoidance (derived) & 5% asset; PPP pathway

Intended result

Better discipline and clinical outcomes, smoother service flow, healthier financial flows and revenue cycle, **savings**, **alternative revenue options** and fuller **utilisation of resources** — with **SHIFA** as the digital backbone and **EHF** as the model of care — aiming to make university health services financially sustainable.

A former seat at many tables that shape Saudi health

I carried the University's voice into regulation, financing, data and population-health policy — and brought national priorities back into curricula, services and research.



UNIVERSITY COMMITTEES & COUNCILS (CURRENT)

- University Health Services Performance Development Committee
- Electronic Health Systems Technical Integration Monitoring Committee
- Hospital Project Monitoring Committee
- University Sustainability Report Preparation Team
- Health Volunteer Programs Committee
- Scientific Review Committee, Rural Women's Initiative • Supervisory Committee, Rural Women's Health Initiative
- Scientific Committee, International Conference on Development Project Management
- General Surgery and Emergency Medicine Department Councils

COLLEGE-LEVEL GOVERNANCE (2014 – PRESENT)

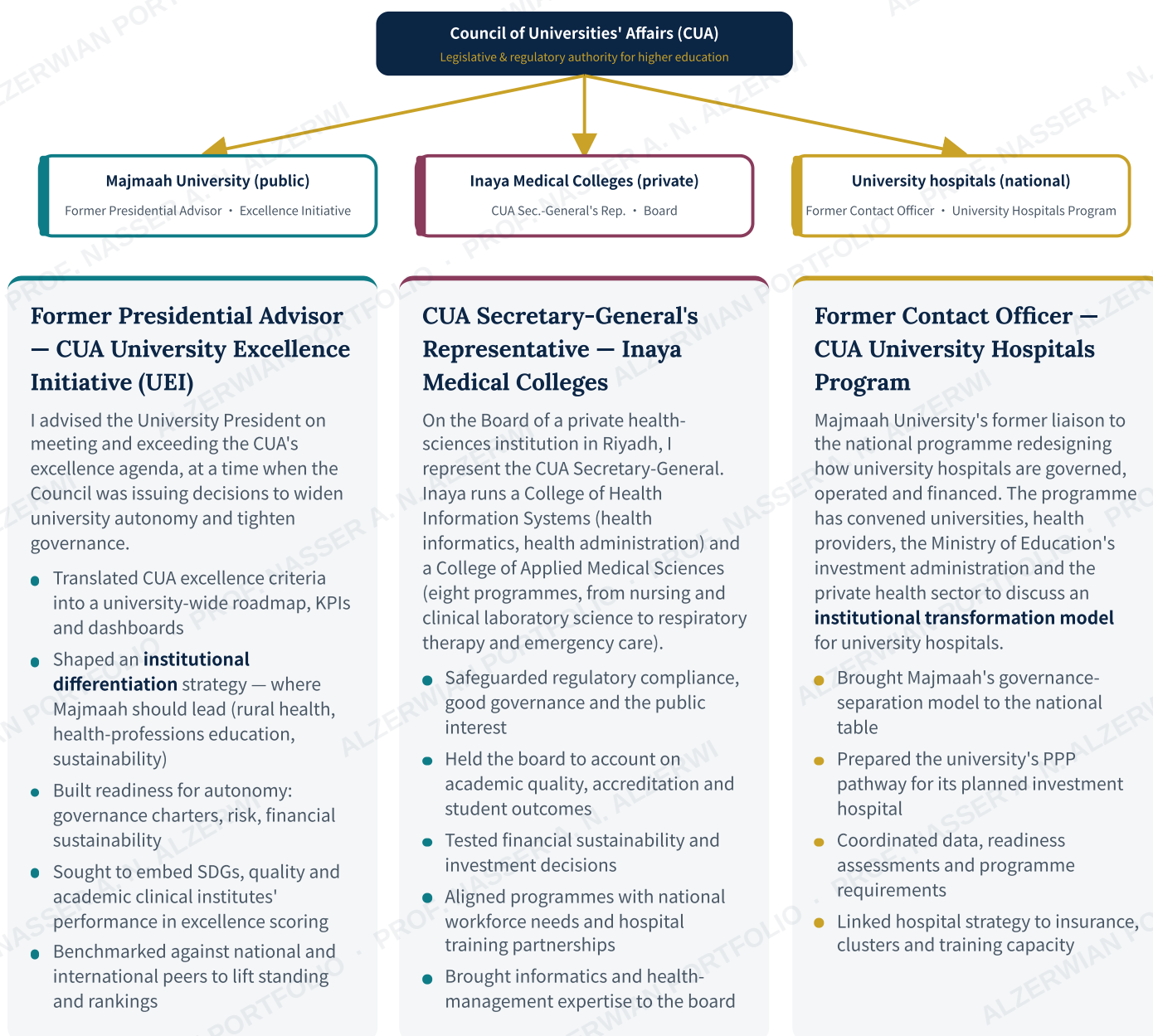
- Former Chair, College of Dentistry Council (as Dean, from 2023)
- Member, Faculty Board, College of Medicine (2017–2022)
- Quality Committee — representative of clinical departments (2017–)
- Surgery Module Committee (2014–); Director, EM Module Committee (2017–); Coordinator, EM-II (2016–)
- Student Extracurricular Activities and Community Service Committees (2020–)
- Former member, Disciplinary Committee

PROFESSIONAL MEMBERSHIPS

Saudi Commission for Health Specialties (licensed) • Saudi Society of General Surgery • Society of Robotic Surgery • Association of Korean-Saudi Medical Training Program Alumni

I carried the regulator's agenda into public and private institutions

Three former roles connected me to the Council of Universities' Affairs — the body that legislates for and oversees Saudi higher education — in 1446–1447H alone it issued 22 decisions to **strengthen governance, widen university autonomy and create a more flexible academic environment**.



Public sector

Excellence, autonomy and differentiation for a public university.

Private sector

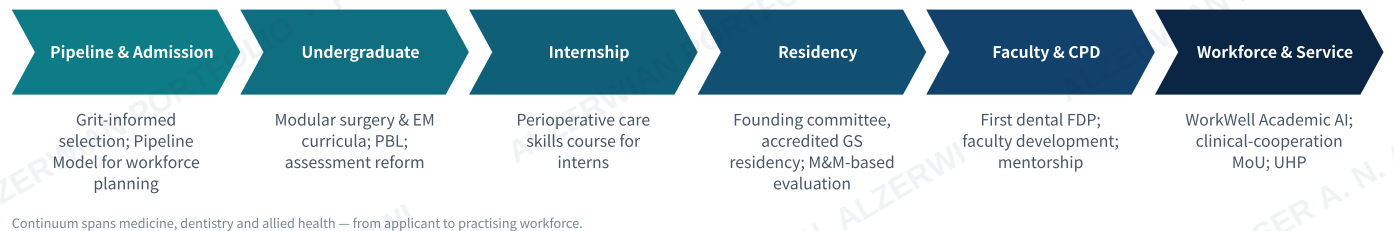
Regulatory stewardship of private health-sciences education.

Health system

Transformation of university hospitals into sustainable providers.

Reforming the health-professions education continuum

My education scholarship diagnoses the system; my leadership redesigns it — from who we admit to how the graduate workforce is sustained.



Former Dean, College of Dentistry — reform in practice

- Dean from January 2023
- Led the college to **national programmatic accreditation** from the Education & Training Evaluation Commission (ETEC) in 2025
- **Established the college's first Faculty Development Programme** (2023)
- Launched reforms in **education and assessment** across the programme
- As Supervisor-General, oversaw the Dec 2025 expansion of the free Al-Zulfi dental teaching clinics
- Co-authored the **Pipeline Model** for the dental education continuum (with Jayakumar, Salama, Rayzah, Alrohaimi & Alhumedani; Int J Edu Sci, 2025)

Curricular & programme design

- Co-designed the first **Surgery Module** (2014) and led the **Emergency Medicine** module
- Member of the founding committee of the **SCFHS-accredited** General Surgery Residency at KKH Majmaah
- Founding Director, **Saudi Society of Surgical Education** (2022–)
- Organised the first Perioperative Care Skills course for interns (2019)
- Trained in Problem-Based Learning (basic & advanced, 2017)
- Faculty-development talks: “The M&M Meeting Approach to Medical Education Evaluation” (2017), “Flexner's Dread” (2021)

From scholarship to system change

Scholarship	Insight	Translated / translatable into
Flexner has fallen — de-Flexnerization (World J Clin Cases, 2023)	Medical education is drifting back toward pre-Flexnerian fragmentation	Governance and quality safeguards in curricular reform; institution-wide standards across colleges
Grit & academic performance (Adv Med Educ Pract, 2020) + published debate letters	Non-cognitive traits predict success	Holistic admissions criteria; early-support and mentoring pathways
Mentorship value by academic performance (JEMDS, 2020)	Mentoring perception varies with performance	Targeted mentorship programmes; faculty-development design
The Pipeline Model (co-authored; Int J Edu Sci, 2025)	Dental education must be planned as a workforce pipeline	Strategic health-workforce planning policy; intake-to-employment alignment
WorkWell Academic — AI for workforce sustainability, with M. Rayzah & A. Assalman (CIFAL/UNITAR award for the innovative idea, 2025; Najran HPE Forum 2026)	Faculty burnout & retention risk may be detectable early	AI-driven early-warning and wellbeing dashboards for academic health workforces

Books: *The Evolution of Surgical Education: A Pictorial Journey* (Author and Editor-in-Chief; NeucitePress 2025); *The Downward Spiral of Medical Education* (NeucitePress 2026); Arabic translation of *Pearls for Leaders in Academic Medicine* (Wilson, Perman & Clawson; Springer).

Embedding the SDGs institution-wide

I treat sustainability not as a report but as an operating system: a transdisciplinary, whole-institution approach that links curriculum, campus operations, research and community.

LEAP-FAST

Institutional Strategy Workbook — the LEAP-FAST programme tool (UNITAR, UNESCO, CIFAL Saudi Arabia, Majmaah) for SDG integration; poster, Najran HPE Forum, 2026. Co-creation workshop, 2nd edition (UNITAR & CIFAL Saudi Arabia, Nov 2025) — **award of appreciation** for outstanding contribution.

WORKWELL ACADEMIC

AI-driven workforce sustainability in health-professions education, with M. Rayzah & A. Assalman. **Award** for the innovative idea of AI integration, CIFAL/UNITAR, Majmaah University (Nov 2025); presented at Najran 2026.

RSME-ESD

Rhizomatic Social Micro-Innovations & Entrepreneurship in ESD — project completed in a UNITAR CIFAL workshop (2024). A bottom-up model for scaling community-led sustainability ideas, building on Deleuze and Guattari's rhizome and Cormier's rhizomatic learning.

SDG contribution map

3 Good Health & Well-being	Hajj health convoy; rural women's health; health volunteering; COVIDSurg safety evidence	4 Quality Education	Dental accreditation; FDP; curricular & assessment reform; LEAP-FAST	5 Gender Equality	Rural Women's Initiative scientific review & supervision
8 Decent Work	WorkWell Academic — AI for health-workforce sustainability	9 Industry & Innovation	Digital-health integration; AI-integration idea award; PPP hospital pathway	10 Reduced Inequalities	Access & equity in elective and minimally invasive surgery across LMICs
11 Sustainable Communities	RSME-ESD rhizomatic social micro-innovations; community outreach	13 Climate Action	Environmental impact of surgery (BJS, 132 countries); sustainable hospitals	17 Partnerships	UNITAR/CIFAL; global collaboratives; Al Habib MoU; cluster MoUs in negotiation

INSTITUTION-WIDE & COMMUNITY IMPACT

- Member, **University Sustainability Report** Preparation Team; participant, Majmaah University Sustainability Conference (2024)
- Oversaw Majmaah University's **24/7 health convoy** serving pilgrims at the Holy Sites, Hajj 2025
- "Facilitating Personality for Volunteer Work" award 2024 (Social Responsibility Observatory) and "Active Personality in Enhancing Health Volunteer Empowerment Procedures" award 2025 (Majmaah University, Ataa Watan)
- Voluntary surgical camp in Cameroon with WAMY (2009); College of Medicine community outreach (2019)
- Organised the Majmaah University Stroke Conference (2024)

DEVELOPMENT-SECTOR CREDENTIALS

- PMD Pro (Project DPro) Foundation** certification in Project Management for Development Professionals, PM4NGOs (June 2026)
- UNITAR CIFAL workshop on Project Management for Professionals, Riyadh (2026)
- Scientific Committee, International Conference on Development Project Management
- Participant, Fourth Conference on Corporate & Governmental Governance, Alfaisal University (2026)
- Green-surgery science: group collaborator, global co-prioritisation to reduce the environmental impact of surgery (BJS 2023) and NIHR Environmentally Sustainable Hospitals group (Anaesthesia 2025)

My whole-institution sustainability model

Governance

SDG targets in institutional strategy (using the LEAP-FAST workbook); sustainability reporting

Curriculum

ESD woven through health-professions programmes and faculty development

Operations

Green-theatre and sustainable-hospital practices in university facilities

Research

Equity, access and environmental-impact evidence from 83–132-country cohorts

Community

Volunteer empowerment, rural women's health, mass-gathering care

Beyond the operating room: the full determinants of health

My work combines four lenses that modern health systems need together. Each is grounded in published evidence and tied to a concrete application.

Biopsychosocial approach

EVIDENCE

- Grit and psychological factors in learner success (2020) — the psychosocial dimension of education
- Scoping review of long-COVID neuropsychiatric symptoms and hippocampal neurogenesis (PeerJ 2025)
- Former representative to the National Center for Mental Health Promotion
- Talks on humanities in medical education and on decision-making & leadership

Translation → Care and education models that treat patients, students and staff as whole persons — including WorkWell Academic for staff wellbeing.

Socioeconomic & commercial determinants

EVIDENCE

- Effect of hospital **profit and teaching status** on abdominal aorta and IVC injuries after severe abdominal trauma (Emerg Med Int 2023)
- Nationwide survey of COVID-19's impact on health and lifestyle in Saudi Arabia (2022)
- Access to and quality of elective care in 83 countries (Lancet Glob Health 2024); safety & equity of scaling MIS in 109 countries (2026)
- Rural Women's Health Initiative; former representative to Weqaya and the National Diabetes Center

Translation → Payer and provider design that accounts for incentives, ownership and access — directly informing insurance and PPP reforms.

Model-of-care innovation

EVIDENCE

- Fellowship-trained in minimally invasive HPB surgery and abdominal organ transplantation at Samsung Medical Center, Seoul (2014–2016)
- Surgical-preparedness index validated in 1,632 hospitals / 119 countries (Lancet 2022); COVID-era surgical pathways (scoping review, Healthcare 2024)
- **Eudaimonic Holistic Flourishing (EHF)**: my model of care — designed around eight flourishing domains, reciprocal flourishing, flourishing-adjusted value
- Mass-gathering (Hajj) mobile care; free dental teaching-clinic network; former Patient Experience Center representation

Translation → Pathway redesign and the EHF model of care — whole-person, integrated, data-enabled — designed to raise safety, access and value.

Bio-, health & clinical informatics

EVIDENCE

- GSU-Pulmonary Score — prognostic model for post-operative pulmonary complications (**Lancet Digital Health** 2024)
- **SHIFA**: the sovereign unified EMR I led — five service lines, NPHIES/Rasd/Weqaya/SFDA links, 100% data migrated
- Big-data outcomes research on the US National Trauma Data Bank (2021–2023)
- E-Health Systems Technical Integration Monitoring Committee; former representative to the National Health Information Center and Virtual Health initiatives; AI-integration idea award

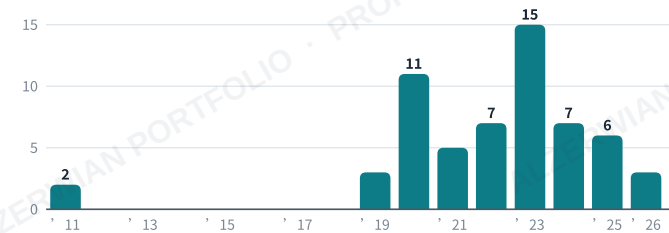
Translation → SHIFA as the digital backbone: interoperability, research data and a base for AI readiness across university health services.

Transdisciplinary by design

My collaborations run from surgeons and anaesthetists to pharmacologists, nanotechnologists, physiologists, educators, economists, sustainability experts and UN agencies — 15 translational papers on green-synthesised nanoparticles, targeted anti-cancer agents and wound healing sit alongside health-services, education and global-surgery studies. This breadth is what lets me build **institution-wide** strategies rather than departmental fixes.

Evidence that travels from journal to practice

PEER-REVIEWED OUTPUTS BY YEAR



59 entries, 2011–2026 (curated from CV; includes one letters entry; excludes books and peer reviews)

1,748

Google Scholar citations (self-reported)

17 / 29

h-index / i10-index (Google Scholar)

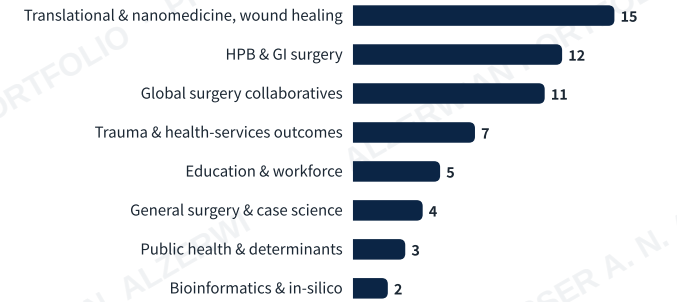
7

Lancet-family & BJS group-collaborator papers

40+

manuscripts reviewed for national & global journals; promotion reviewer

OUTPUTS BY RESEARCH THEME



Research-to-practice translation matrix

Research line	Key outputs (consortium papers: group collaborator)	Real-world application — delivered or ready to deploy
Surgical-system resilience	Surgical preparedness index, 1,632 hospitals / 119 countries (Lancet 2022); vaccination modelling for safe surgery (BJS 2021); 30-day mortality & hospital preparedness (2026)	Pandemic and surge planning for university hospitals; elective-surgery recovery protocols; hospital-preparedness KPIs
Peri-operative safety & prediction	GSU-Pulmonary Score (Lancet Digital Health 2024); timing of surgery after SARS-CoV-2; pre-operative isolation; VTE after surgery (Anaesthesia 2021–22)	Pre-operative risk calculators embedded in e-health records; scheduling policy
Equity & access in surgery	Hernia as tracer, 83 countries (Lancet Glob Health 2024); MIS scale-up, 109 countries (2026); global anaesthesia practice (2025)	Service-planning and insurance benefit design for elective care; MIS roll-out standards
Health-services economics	Profit & teaching status vs trauma outcomes (2023); NTDB studies of vascular, renal & pancreatic trauma (2021–23)	Provider-payment and PPP design; trauma-system configuration; teaching-hospital mandates
HPB & GI surgical science	Acute pancreatitis management review (2023); gallstone ileus meta-analysis (2021); NPWT after Whipple (2025); anatomosurgical classification (2020)	Local clinical pathways; surgical-site-infection bundles; operative teaching
Environmental sustainability	Reducing the environmental impact of surgery, 132 countries (BJS 2023)	Green-theatre policies; hospital sustainability reporting (University Sustainability Report)
Translational & in-silico science	15 papers on green nanoparticles, PI3K/Akt/mTOR-targeted agents & wound healing; virtual drug screening (2025)	Pipeline for local biotech, IP and health-investment partnerships

A surgeon first — the credibility behind the leadership

Specialist scope

Consultant General Surgeon specialising in **hepatopancreatobiliary (HPB) surgery, surgical oncology** and **advanced minimally invasive surgery**; fellowship-trained in **abdominal organ transplantation** (liver, kidney, pancreas) and abdominal sarcoma.

- 2-year hands-on fellowship at **Samsung Medical Center, Seoul** (2014–2016) in oncological and minimally invasive HPB surgery, abdominal organ transplantation (liver, kidney, pancreas) and abdominal sarcoma surgery; research on laparoscopic major hepatectomy after portal vein embolisation
- Consultant, King Khalid Hospital, Majmaah (appointed 2014; HPB practice from 2016); King Salman Hospital, Riyadh (2017–2019)
- Treated a rare Lemmel's syndrome case by open surgery on the sphincter of Oddi after failed endoscopy — full recovery (covered by Majmaah University news, 2019)
- Emergency Whipple for a duodeno-caval fistula from a kissing post-bulbar ulcer (Saudi Society of General Surgery, 2020; World J Clin Cases 2022)
- Surgical author: *The Perioperative Notebook* and *The Surgical M&M Notebook* — "The Zerwian Notebooks" (2021)

Clinical training & courses

ATLS (2008, 2012) • ACLS (2007) • BLS (2017) • BOSS (2008) • Basic & Advanced Laparoscopic Skills (2011) • Fundamentals of Critical Care (2011) • Advanced Operative Trauma Management (2012) • Surgical Nutrition (2009) • Deceased-Donor and Living-Donor Liver Transplant hands-on workshops (2015, 2016) • SMC Image-Guided Tumour Ablation (2016) • KSELS & International Laparoscopic Surgery Postgraduate Course (2015) • KHIDI pre-fellowship programme, Korea (2014)

QUALIFICATIONS

Year	Qualification
2023	MSc Healthcare Management — Saudi Electronic University & Colorado State University Global; GPA 4/4, 1st-class honours & programme distinction award
2014–16	Fellowship in HPB oncological & minimally invasive surgery and abdominal organ transplantation — Samsung Medical Center, Korea
2014	Arab Board of Surgery
2013	Saudi Board of General Surgery; SCFHS Certificate of Completion of Training
2008–13	General Surgery Residency — Prince Sultan Military Medical City (incl. KKHU & SFH rotations)
2007	MCCEE — Medical Council of Canada Evaluating Examination
2006	MBBS with first-class honours — King Khalid University; ranked 1st in class, GPA 4.84/5

ACADEMIC APPOINTMENTS

Dec 2024 –	Professor of Surgery , Majmaah University
2021 – 2024	Associate Professor of Surgery
2014 – 2021	Assistant Professor of Surgery

GLOBAL TRAINING FOOTPRINT

Saudi Arabia (KKU, KFNGH, KFMC, PSMCC, SFH, KKHU) • **Korea** (Samsung MC, KHIDI; lecturer, Korean-Arabic Medical Interpreting course, Hankuk University of Foreign Studies) • **USA** (joint MSc with Colorado State University Global, via SEU) • **Canada** (MCCEE examination) • **Cameroon** (humanitarian surgery)

From the operating room to the system: why surgical training shapes my leadership

M&M culture →

Quality governance: no-blame review, root-cause analysis and outcome audit applied to institutions — my M&M approach to education evaluation.

Perioperative pathways →

Model-of-care design: standardised, risk-stratified pathways with measurable handovers across teams.

Transplant logistics →

System coordination: donor, recipient, lab and ICU aligned in real time — the same discipline behind cluster MoUs and referral networks.

Trauma data →

Payer-provider insight: registry analytics on ownership, teaching status and outcomes inform financing and PPP design.

Honours, awards & professional growth

HONOURS & AWARDS

2026	Best Oral Presentation — First Place Health Professions Education Forum, Najran University
2025	Innovation award — AI integration idea “WorkWell Academic” CIFAL / UNITAR, Majmaah University
2025	Award of Appreciation, LEAP-FAST Co-Creation Workshop (Ed. II) CIFAL Saudi Arabia & Majmaah University
2025	“Active Personality in Enhancing Health Volunteer Empowerment Procedures” Majmaah University (Ataa Watan)
2024	“Facilitating Personality for Volunteer Work” Ataa Watan, Social Responsibility Observatory
2023–24	Award of Excellence in Scientific Research — Faculty College of Medicine, Majmaah University
2023	Distinction award, MSc Healthcare Management SEU & Colorado State University joint programme
2021–22	President's Award for Faculty Distinction & Excellence Majmaah University
2021–22	President's Award for Quality & Excellence — Faculty Majmaah University
2016	Travel Award, The Liver Week 2016 Incheon, Korea
2015	Certificate of Appreciation — special lecture, Korean-Arabic Medical Interpreting Hankuk University of Foreign Studies, Seoul
2012	Best Evidence-Based Review Presenter (2011–12); Excellent Performance recognition Prince Sultan Military Medical City
2009	Appreciation — residency academic lecture PSMMC
MBBS	Four distinction awards: premedical, basic sciences, medicine, surgery King Khalid University

CONFERENCES, TALKS & ORGANISING (SELECTED)

- Poster: **LEAP-FAST Institutional Strategy Workbook**; poster & talk: **WorkWell Academic** (with M. Rayzah, A. Assalman); co-authored poster on AI-powered surgical simulation (first author Y. Alzerwi) — HPE Forum, Najran University (2026)
- Co-author (3rd of 12), two oral abstracts, Korean Association for the Study of the Liver (2016): mRECIST response in LDLT; laparoscopic anatomical resection of central tumours
- Poster-oral, 13th Symposium of the Saudi Society of General Surgery (2020)
- Organiser: Majmaah University Stroke Conference (2024); Perioperative Care Skills for Interns (2019); career series — Life After Medical School, Time Management, French Residency Orientation, Specialties Mini-Conference (2020)
- Speaker: Decision-Making & Leadership Skills; Humanities in Medical Education; How to Choose Your Specialty (2020)
- Participant: Majmaah Sustainability Conference (2024); Corporate & Governmental Governance Conference, Alfaisal University (2026); Riyadh Surgical Club; Surgery Review Days (2019)

CERTIFICATIONS & EXECUTIVE LEARNING

- **Certificate of Expert of SDG Implementations**
- **Project DPro (PMD Pro) Foundation** — PM4NGOs, effective 8 June 2026 (cert. 114680-156385439-43729)
- Certificate of Appreciation — oral presentation, WorkWell Academic, HPE Forum 2026 (SSME & Najran University)
- UNITAR CIFAL: Project Management for Professionals (2026); LEAP-FAST Certificate Programme co-creation (2025); RSME-ESD project (2024)
- MSc Healthcare Management — finance, economics, quality, informatics, strategy, law & policy
- PBL in Medical Education, basic & advanced (Sulaiman Al Rajhi Colleges, 2017)
- Research & EBM development (2011); mentorship principles (KSU, 2021); research-visibility training (2023)

BOOKS & TRANSLATION

- *The Evolution of Surgical Education: A Pictorial Journey* (NeucitePress, 2025; Author and Editor-in-Chief)
- *The Downward Spiral of Medical Education* (NeucitePress, 2026)
- *The Perioperative Notebook* (2021) · *The Surgical Mortality & Morbidity Notebook* (2021)
- Arabic translation: *Pearls for Leaders in Academic Medicine* (Wilson, Perman & Clawson; Springer)

Publications by theme

GLOBAL SURGERY & HEALTH-SYSTEM COLLABORATIVES (ALZERWI NA: NAMED GROUP COLLABORATOR)

1. COVIDSurg & GlobalSurg Collaboratives. SARS-CoV-2 vaccination modelling for safe surgery to save lives: data from an international prospective cohort study. *Br J Surg*. 2021;108(9):1056–1063.
2. GlobalSurg & COVIDSurg Collaboratives (Glasbey JC, et al.). Elective surgery system strengthening: development, measurement, and validation of the surgical preparedness index across 1632 hospitals in 119 countries. *Lancet*. 2022;400(10363):1607–1617.
3. NIHR Global Health Research Unit on Global Surgery. Reducing the environmental impact of surgery on a global scale: systematic review and co-prioritisation with healthcare workers in 132 countries. *Br J Surg*. 2023;110:804–817.
4. Bravo L, et al. A prognostic model for use before elective surgery to estimate the risk of postoperative pulmonary complications (GSU-Pulmonary Score). *Lancet Digit Health*. 2024;6(7):e507–e519.
5. Dönmez AE, et al. Access to and quality of elective care: a prospective cohort study using hernia surgery as a tracer condition in 83 countries. *Lancet Glob Health*. 2024;12(7):e1094–e1103.
6. Kamarajah SK, et al. Safety and equity in scaling minimally invasive surgery worldwide in 109 countries using cholecystectomy as a tracer procedure. *Lancet Glob Health*. 2026;14(2):e199–e212.
7. COVIDSurg Collaborative and GlobalSurg Collaborative. Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study. *Anaesthesia*. 2021;76(6):748–758.
8. COVIDSurg & GlobalSurg Collaboratives. Effects of pre-operative isolation on postoperative pulmonary complications after elective surgery. *Anaesthesia*. 2021;76(11):1454–1464.
9. COVIDSurg & GlobalSurg Collaboratives. SARS-CoV-2 infection and venous thromboembolism after surgery. *Anaesthesia*. 2022;77(1):28–39.
10. NIHR Global Health Research Group on Environmentally Sustainable Hospitals in LMICs. Global anaesthesia practice using inguinal hernia surgery as a tracer condition. *Anaesthesia*. 2025;80(11):1343–1351.
11. Rizzo PB & COVIDSurg Collaborative. 30-day postoperative mortality and the effects of hospital preparedness during the COVID-19 pandemic: a pooled analysis of prospective international cohort studies. *Lancet Reg Health Eur*. 2026;62:101566.

MEDICAL & DENTAL EDUCATION, WORKFORCE

12. AlZerwi N, Jayakumar S, Salama MH, Rayzah M, Alrohaimi Y, Alhamedani TB. The Pipeline Model: a novel transformative pathway in the dental education continuum for Saudi Arabia's strategic health workforce planning policy. *Int J Edu Sci*. 2025;48:1–6.
13. AlZerwi NA. Flexner has fallen: transitions in medical education system across time, a gradual return to pre-Flexnerian state (de-Flexnerization). *World J Clin Cases*. 2023;11(21):4966.
14. AlZerwi NAN. Effects of grit on the academic performance of medical students: a cross-sectional study at Majmaah University. *Adv Med Educ Pract*. 2020;11:419–425.
15. AlZerwi NA. Does academic performance affect the perceived value of mentorship, and mentor's influence on student's satisfaction. *J Evol Med Dent Sci*. 2020;9(37):2710–2716.
16. AlZerwi NA. Grit scores: a predictor of medical school success? [Response to letter]. *Adv Med Educ Pract*. 2020;11:537–538. • Sensing change [Response to letter].

TRAUMA, EMERGENCY & HEALTH-SERVICES OUTCOMES

17. AlZerwi NA. Effect of the profit and teaching status of hospitals on the patterns and outcomes of abdominal aorta and inferior vena cava injuries after severe abdominal trauma. *Emerg Med Int*. 2023.
18. AlZerwi NA. Traumatic injuries to the renal blood vessels and in-hospital renal complications in patients with penetrating or blunt trauma. *Front Surg*. 2023;10:1134945.
19. AlZerwi NA. Injury characteristics and predictors of mortality in patients undergoing pancreatic excision after abdominal trauma: an NTDB study. *Medicine*. 2023;102(24).
20. AlZerwi NAN, Alnemare AK. Mechanism of injury and in-hospital mortality in penetrating jugular vein injuries: an NTDB study. *Eur Rev Med Pharmacol Sci*. 2021;25(12):4351–4360.
21. Rayzah M, AlZerwi NA, et al. Resuscitative endovascular balloon occlusion of the aorta in abdominal trauma: zone-specific outcomes and predictors of mortality. *Int J Emerg Med*. 2026;19:40.
22. AlZerwi N. Non-therapeutic management of adhesive small bowel obstruction: a descriptive map of practice patterns among general surgeons in Saudi Arabia. *J Clin Diagn Res*. 2020;14(10).
23. AlZerwi NAN. Accuracy of visual estimation of blood loss among healthcare providers: a cross-sectional comparative study. *Jouf Univ Med J*. 2019;6(3):25–35.

HEPATOPANCREATOBILIARY & GASTROINTESTINAL SURGERY

24. AlZerwi N. Surgical management of acute pancreatitis: historical perspectives, challenges, and current management approaches. *World J Gastrointest Surg*. 2023;15(3):307.
25. Rayzah M, AlZerwi NA, et al. Negative pressure wound therapy for surgical site infection prevention following pancreaticoduodenectomy: a systematic review and meta-analysis. *Surgeries*. 2025;6(4):88.
26. AlZerwi NA, Idrees B, Alsareii S, et al. The regularity of the site of impaction in recurrent gallstone ileus: a systematic review and meta-analysis. *Can J Gastroenterol Hepatol*. 2021.
27. AlZerwi NA. Diagnostic challenges in postoperative intra-abdominal sepsis in critically ill patients: when to reoperate? *Postępy Hig Med Dosw*. 2022;76(1):420–430.
28. AlZerwi NA. Duodenoduodenal and duodenojejunal intussusceptions in adults: a systematic review. *AIMS Med Sci*. 2020;7(3):204–222.
29. AlZerwi NAN. Modification of Prudhomme's classification of retro-duodenal bilio-arterial relations in the operative management of hemorrhagic duodenal ulcer: an anatomosurgical study. *J Res Med Dent Sci*. 2020.
30. AlZerwi NAN. Predictors of superior mesenteric artery syndrome: evidence from a case-control study. *Cureus*. 2020;12(8).
31. AlZerwi NAN, Kwon CHD, Cho W, Lee SH, Joh JW. Safety and feasibility of laparoscopic major hepatectomy after portal vein embolization. *Majmaah J Health Sci*. 2020.
32. AlZerwi N. Post-bulbar duodenal ulcer with anterior perforation with kissing ulcer and duodenocaval fistula. *World J Clin Cases*. 2022;10(25):9071.
33. AlZerwi NAN. Recurrent ascending cholangitis with acute pancreatitis and pancreatic atrophy caused by a juxtapapillary duodenal diverticulum. *Medicine*. 2020;99(27).
34. AlZerwi NAN. Primary pancreatic lymphoma masquerading as carcinoma. *Case Rep Oncol Med*. 2020.
35. AlZerwi NAN, Idrees B. Blood group phenotypes associated with risk of gastric cancer: a case-control study. *Majmaah J Health Sci*. 2020;8(3).

SELECTED BIBLIOGRAPHY (CONTINUED)

GENERAL SURGERY, NUTRITION & CASE SCIENCE

36. Alhajri K, **Alzerwi N**, et al. Disseminated (miliary) abdominal tuberculosis after laparoscopic gastric bypass surgery. *BMJ Case Rep*. 2011.
37. Alhajri K, Alhasan I, **Alzerwi N**, Abudaff N. Adrenal haemangioma. *BMJ Case Rep*. 2011.
38. **Alzerwi NAN**, et al. Perforated appendicitis as a source of Fournier's gangrene in an immunocompetent male. *Int Surg J*. 2019;6(10):3813–3816.
39. Al-Nasser A, **Alzerwi N**, et al. Nutritional demand after gastric surgery. *Clin Surg*. 2019;4:2465.

PUBLIC HEALTH, COVID-19 & DETERMINANTS

40. **Alzerwi NA**, Rayzah M, Alnemare AK, Elkhaila AM. Optimizing surgical care amidst COVID-19: a scoping review of practices and policies. *Healthcare*. 2024;12(1):96.
41. Mahfoz B, Shaik RA, Ahmad MS, **Alzerwi NAN**, Almutairi R. A nationwide survey to assess COVID-19's impact on health and lifestyle in Saudi Arabia. *Eur Rev Med Pharmacol Sci*. 2022;26(11):4092–4101.
42. Shaik RA, et al. Comprehensive highlights of the universal efforts towards the development of COVID-19 vaccine. *Vaccines*. 2022;10(10):1689.

BIOINFORMATICS, IN-SILICO & NEUROSCIENCE

43. Elsaman T, et al. Pharmacophore-based virtual screening and in silico investigations of small molecule library for discovery of human hepatic ketohexokinase inhibitors. *Front Pharmacol*. 2025;16:1531512.
44. Saikarthik J, et al. Structural and functional neuroimaging of hippocampus to study adult neurogenesis in long COVID-19 patients with neuropsychiatric symptoms: a scoping review. *PeerJ*. 2025;13:e19575.

TRANSLATIONAL MEDICINE, NANOMEDICINE & WOUND HEALING

45. Elkhaila AM, et al. Insight into oncogenic viral pathways as drivers of viral cancers. *Curr Oncol*. 2023;30(2):1924–1944.
46. Alsrhani A, et al. Albumin nanoparticles encapsulated visnagin in MDA-MB-468 triple-negative breast cancer cells. *Molecules*. 2023;28(7):3228.

47. Alzahrani B, et al. Albumin–chlorogenic acid nanoparticles on apoptosis and PI3K/Akt/mTOR pathway in MDA-MB-435s cells. *Nanomaterials*. 2023;13(9):1438.
48. Alzahrani B, et al. Pluronic-F-127-passivated SnO₂ nanoparticles from Polygonum cuspidatum root extract. *Plants*. 2023;12(9):1760.
49. Alzahrani B, et al. Sodium alginate encapsulated iron oxide with thymoquinone induces apoptosis in breast cancer cells. *Int J Biol Macromol*. 2023;244:125054.
50. Rayzah M, et al. Syzygium cumini-derived green TiO₂ nanoparticles induce caspase-dependent apoptosis in hepatic cancer cells. *Plants*. 2023;12(18):3174.
51. Althobiti MM, et al. Anti-cancer and antimicrobial effects of MnO nanoparticles from Glycyrrhiza uralensis. *Green Process Synth*. 2023;12(1):20230063.
52. Alanazi F, et al. Pluronic F127-encapsulated chlorogenic acid nanoparticles in liver cancer cells and zebrafish toxicity. *e-Polymers*. 2023;23(1):20230053.
53. Elderderly AY, **Alzerwi NA**, et al. Iron oxide–sodium alginate–eugenol nanocomposites induce apoptosis via PI3K/Akt/mTOR in Hep3 cells. *Int J Biol Macromol*. 2024;256:127490.
54. Alzahrani B, et al. Mn- and Cu-coated NiO nanoparticles from Carica papaya induce breast cancer cell death. *Green Process Synth*. 2024;13(1):20230087.
55. Alsareii SA, **Alzerwi NA**, et al. Topical Premna integrifolia accelerates wound healing. *Evid Based Complement Alternat Med*. 2022.
56. Alsareii SA, **Alzerwi NA**, et al. Manilkara zapota extract ointment speeds skin-wound healing in rats. *Front Pharmacol*. 2023;14.
57. Ali SI, et al. Rutin-encapsulated decellularized earthworm granulation hydrogel promotes angiogenesis in diabetic wound healing. *J Drug Deliv Sci Technol*. 2024;97:105803.
58. AlWadai HH, et al. Biosynthesized ZnO nanoparticles from Cycas revoluta: wound-healing, antimicrobial and cytotoxic potential. *Front Pharmacol*. 2025;16:1605717.
59. Suganitha B, et al. Neurotrophic factor-mediated neurorestorative effect of Pongamia pinnata against cerebral hypoperfusion in rats. *Int J Morphol*. 2024;42(3):876–890.

PEER REVIEW

Peer reviewer for multiple national and global scientific journals and peer reviewer for academic promotion at multiple national universities. Academic peer reviewer and judge for the SCFHS IPECP curriculum.

Reviewer for **Cureus** (24 manuscripts, 2020–22), **Majmaah Journal of Health Sciences** (8), **World Journal of Clinical Cases** (3), **World Journal of Hepatology**, **Journal of Blood Medicine, Therapeutics and Clinical Risk Management**, **Clinical and Experimental Gastroenterology**, **Journal of Inflammation Research** and **BMJ Case Reports** (acknowledged reviewer).

EARLY RESEARCH

Undergraduate field projects: malnutrition risk factors in children (Abha PHC, 2004); quality assurance of chronic-disease clinics (2006) — the first steps toward a career in health-services quality. Participant, first college debate on objectivity in clinical examinations.

PROFESSIONAL REFEREES

Dr. Mazen Hassanain

Consultant HPB & Liver Transplant Surgery, FRCS — King Saud University

Dr. Saud Alrasheidi

Chief of Surgery & Residency Program Director — Security Forces Hospital

Dr. Mohammed Alzaben

Head of General Surgery — Kingdom Hospital, Riyadh

Contact details available on request.

Prof. Mohammed Al-Shehri

Consultant Breast & Endocrine Surgery, FRCS — College of Medicine, King Saud University

Dr. Mohammed Assiri, FRCS

Director of Postgraduate & Academic Affairs — Security Forces Hospital

Dr. Saleh Albishri

Consultant HPB Surgeon — Security Forces Hospital, Riyadh

Dr. Ahmed Alzubaidi, FRCS

Chief of Medical Staff, Colorectal Surgery — King Saud University