ADVOCACY FOR HOSPITAL REVITALISATION RISK MANAGEMENT POLICY

A CASE STUDY: PAARL HOSPITAL

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The National Department of Health of South Africa implemented a Hospital Revitalisation Grant to modernize and transform the infrastructure and health technology of hospitals and improve the quality of care.

Paarl Hospital, a secondary level public regional hospital, was entered into the Hospital Revitalisation Programme in May 2006.
Paarl Hospital is situated approximately 65 kilometers outside of Cape Town.
Paarl is an important agricultural and commercial centre.
The Paarl Hospital had 250 beds and provides public health care at a secondary level to a drainage area of clients which includes the whole of the West Coast Winelands Region.
The Hospital Revitalisation Programme of National Health funded a ± R513 million revitalisation to provide for 369 beds.
The historical 1921 building no longer suitable for modern health care delivery, renovated as an Administration office block, with façade intact, as stipulated by Western Cape Heritage society.
Builder’s yard and new 7 floor block under construction in middle of operational secondary level care hospital site.
STUDY AIM

- The study aimed to critically evaluate the HRP implementation at Paarl Hospital and develop a framework for implementation to address clients, staff and technical quality of care.

“We would do it again, but we would do it differently…”

“We had the experience, but we missed the meaning.”
T.S. Elliot
STUDY RATIONALE

- Building health care facilities is complex and their planning and implementation can give rise to expensive mistakes.
- Research on quality of care in health fulfils a social and practical mandate to create information for use by programmes to improve services towards economic effectiveness and efficiency or by decision makers to inform policy.
OBJECTIVES

- Explore the hospital revitalisation programme at Paarl Hospital in terms of 4 deliverables: infrastructure, health technology, quality assurance and organisational development.
- Development of a quality focussed framework for project implementation from the lessons learnt.
Roger’s diffusion of innovation theory
Roger’s (1983) Diffusion of Innovation Theory is a theoretical approach to understanding how change may be achieved.
- HRP seen as innovation in health system in addressing quality care: **Linkages between resource system and the users and the purveyors of knowledge;** System readiness for innovation

Ulin (2005) applied as approach to understand the adoption of change in health innovation
Sanson-Fisher (2004) called for testing approach in the health care environment
The conceptual model of determinants, dissemination and implementation of innovations in health service delivery and organisation proposed by Greenhalgh *et al.* (2004:595) was adopted for the HRP as an innovation in health service delivery and organisation.

The implementation Paarl Hospital was applied to the conceptual model and various aspects of the hospital’s leadership and management positioned it well as a receptive context for change and innovation in light of the inadequate facilities.
THE INNOVATION
Relative advantage
Compatibility
Low complexity
Observability
Potential for reinvention
Fuzzy boundaries
Risk
Task issues
Nature of knowledge required (tacit/explicit)
Technical support

COMMUNICATION AND INFLUENCE
DIFFUSION (informal, unplanned)
Social networks
Homophily
Peer opinion
Marketing
Expert opinion
Champions
Boundary spanners
Change agents

DISSEMINATION (formal, planned)

OUTER CONTEXT
Sociopolitical climate
Incentives and mandates
Interorganizational norm-setting and networks
Environmental stability

SYSTEM ANTECEDENTS FOR INNOVATION
Structure change
Size/maturity
Formalization relations
Differentiation
Decentralization priorities
Slack resources

SYSTEM READINESS FOR INNOVATION
Tension for change
Innovation-system fit
Power balances (supporters v. opponents)
Assessment of implications
Dedicated time/resources
Monitoring and feedback

LINKAGE
The Innovation
ADOPTER
Needs
Motivation
Values and goals
Skills
Learning style
Social networks
ASSIMILATION
Complex, nonlinear process
"Soft periphery" elements

IMPLEMENTATION PROCESS
Decision making devolved to frontline teams
Hands-on approach by leaders and managers
Human resource issues, especially training
Dedicated resources
Internal communication
External collaboration
Reinvention/development
Feedback on progress

ADOPTEE
Implementation stage
Communication and Information
User orientation
Product augmentation e.g. technical help
Project management support

IMPLEMENTATION
Process
QUALITY POLICY FRAMEWORK

Quality Policy Framework (H122/2002)
National Core Standards
SEAM
SA Excellence model (Eygelaar & Uys, 2004)
Six box
Model of organisational development (Weisbord) as adapted by Johnson (2004)
Change management theory
A case study design, with a qualitative approach

An intensive exploration of a single unit of study including the circumstances, complexities and dynamics of this Public Secondary Regional Hospital project.

Case study methodology was an appropriate choice for a project description, as it allowed for a multi method approach to data collection which included qualitative content analysis.
METHODS

- Focus group discussions, individual and pair interviews – nursing operational and management, design teams, contractors, senior public management and specialists
- Photographic - infrastructure and health technology
- Document review: Adverse incidents, workplace injury register, safety/security reports; mortality + morbidity reports; patient feedback reviews/surveys
Action research methodology, which is concerned with collaborative knowledge enquiry and sharing, was applied by means of an intervention.

The findings which arose during the study were simultaneously used and actions were taken to improve project implementation in the Psychiatry clinical unit’s planning and decanting stage.
ETHICAL CONSIDERATIONS

- Principle approval from the Chief Executive Officer. Favourable conditions to conduct research at facility. Staff and management wanted their ‘voices to be heard!’
- CPUT ethics committee approval
- Western Cape Government Health approval
- Ethical principles were adhered to
This study’s findings indicate that hospital revitalisation has huge benefits to the communities the relevant hospital serves, but that client, staff and technical quality are at risk during implementation.
Demolition of concrete slab to build extensions for new specialist outpatient, causing noise, dust and debris for staff and patients in 6 floors of wards.
CLIENT QUALITY

Positives
- Huge improvement in client satisfaction across all seven domains measured
- Community links strengthened

Challenges
- Noise, dust debris
- Decanting discomfort
- Infection control risk (aspergillus) (sewage)
- Waiting lists
Piling adjacent to tower block of 6 floors of operational wards causing vibration
Positives

- Strategic empowerment
- Learnerships-nursing established
- Community links stronger
STAFF QUALITY

Challenges
- Occupational health risk
- Change management
- Staff morale stretch
- Ergonomics during decanting
- Human Resource non-alignment and increased workload

Relationships and Trust
- Confidence in design team
- New and numerous role players
- Conflict high at meetings
- Clinical staff input valued? especially nursing
Aerial view of temporary walkway which had to be used by staff and to connect wards with services (food, linen and stores)
Challenges

- Safety and Security (Builders, access)
- Adverse events (Client slips)
- Theatre cancellations
- Occupational Health incidents
- Infection Prevention +Control (sewage, mould)
- Fire safety concerns
- Decanting (service interruptions of electricity, water sewage, medical gas, oxygen)
New specialist outpatient area with tiles which initially caused patient and staff slips due to sand residue of building process.
Access route through unsafe construction area of some staff for security installations in basement.
## Paarl Hospital Revitalization Reported Incidents

<table>
<thead>
<tr>
<th>Department</th>
<th>Category of Staff</th>
<th>Incident</th>
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</thead>
<tbody>
<tr>
<td>Pediatrics</td>
<td>Professional Nurse</td>
<td>Fell on hospital grounds and injured her left ankle while walking to ward on uneven parking area during construction</td>
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<tr>
<td>Finance</td>
<td>Senior Administration Clerk</td>
<td>Slipped on temporary walkway built during construction between administration department and hospital during hospital revitalization</td>
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<tr>
<td>Cleaning Department</td>
<td>Housekeeping</td>
<td>Sprained foot in gutter in backyard of hospital with right ankle sprain during hospital revitalization</td>
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<tr>
<td>Emergency Centre</td>
<td>Senior Nursing Auxiliary</td>
<td>Injured right middle finger in blue benches at overnight ward during decanting for hospital revitalization</td>
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<tr>
<td>Medical</td>
<td>Area Manager (Nursing)</td>
<td>Staff member tripped and fell on temporary walkways built for revitalization purposes (uneven surface)</td>
</tr>
<tr>
<td>Linen bank</td>
<td>Housekeeper</td>
<td>Staff member opened service's gate and it fell on her chest and left cheek (recently installed during revitalization )</td>
</tr>
<tr>
<td>Emergency Centre</td>
<td>Doctor (Specialist)</td>
<td>Ceiling panels fell on head due to water leak shortly after construction. Staff member required 7 Stitches for laceration.</td>
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<td></td>
<td>Senior Nursing Manager</td>
<td>Staff member slipped in poorly lit, muddy parking area during hospital revitalization</td>
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<tr>
<td>Neonatology</td>
<td>Nursing</td>
<td>A register was established to record daily head bumps of nursing staff on pendants due to problems with installation</td>
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<td>General Assistant</td>
<td>Staff member was pushing beds for revitalization decanting purposes on a trolley when a bed fell off and crushed his right hand</td>
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Extensions taking place adjacent to and on top of roof of fully operational theatre with Emergency exit of theatre into construction area.
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<td>Assist clinical staff in design visualisation</td>
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<td>Be involved in norms and standards development</td>
<td>Best specifications, norms and standards, cost efficiency, consumables, and durability</td>
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<td>Control Contract management, communication, decanting, relationships, snags and safety</td>
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<td>Assess Risks to Client, Staff and Technical Quality</td>
<td>Align Human Resources to HRP</td>
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<tr>
<td>Baseline QA data for initiatives</td>
<td>Be sure to do Strategic Planning and Professionalism coaching</td>
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<td>Compare Quality Assurance at exit</td>
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BREUSE CASE
(A Strategic document signed off by NDOH)

- Appropriate people involved in development
- Appropriate authorisation, management authorisation
- Appropriate updates and resubmissions to NDOH
- Appropriate risk management to be included in the brief
New specialist outpatient waiting area where seating and space proved to be inadequate due to exponential growth in patient numbers (and OPD services, e.g. audiology, mammography) from planning to commissioning time span.
INFRASTRUCTURE ABC

- Assist clinical staff in design visualisation (mock ups of standard rooms or 3D software)
- Be involved in development and application of norms and standards development (Aircons, lifts, fittings, doors, pigeon pest control)
- **Control Contract management**, decanting, trust relationships, boundaries between contractors and clinical areas, storage space for decanting.
Modern open plan nursing stations with pneumatic tube. The melamine finish of counter tops and plastered bases proved to lack durability from damage by beds and trolleys.
4 L’s (Gordon, HC2020)

- Long life (Sustainability)
- Loose fit (Flexibility)
- Low impact (Reduction of carbon footprint)
- Luminous healing (Enlightened Healing Environment)
Patient lounges were an addition to new wards contributing to the healing environment.
Convenient additional seating on landings between wards for visitors.
HEALTH TECHNOLOGY ABC

- Acquire large items on contract to interface IT and Infrastructure
- Best specifications, norms and standards, cost efficiency, consumables and durability, positioning of pendants, tried and tested
- Cultivate ownership (Standard Operating Procedures; manuals; maintenance)
ORGANISATIONAL DEVELOPMENT ABC

- Align Human Resources to HRP
- Be sure to do Strategic Planning and Professionalism coaching
- Change Management Intervention
New staff lounge providing comfortable relaxation facilities for staff and enhancing staff quality.
QUALITY ASSURANCE ABC

- Assess Risks to Client, Staff and Technical Quality
- Baseline Quality Assurance data for initiatives
- Compare Quality Assurance at exit
Golden triangle

Cost

Aesthetics

Quality

Infrastructure
Durability

Client
Staff
Technical

HT
Tried and tested

OD
Empowering

stewardship
CONCLUSION

- An implementation framework for HRP to safeguard technical quality; care to clients and quality work life of staff to supplement current Project Implementation Manuals.
- Clinicians, managers and stakeholders to be aware of risk and get involved in active risk management
- Advocacy for the staff and patients affected by renovation and re-engineering of operational health facilities essential.
- Nurse leaders to translate evidence to advocate for patient and staff safety; and risk management during health facility infrastructural upgrades
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**Business Case**

- Appropriate people involved in development
- Appropriate authorisation, management authorisation
- Appropriate updates to NDOH
- Appropriate risk management included in brief
New façade of main entrance of Paarl Hospital with specialist outpatient facilities and ample parking for staff and clients.
The End

Questions?