Using facility health information monitoring and interprofessional management teams to describe care pathways in a Central Hospital in 2019:

A Public Health Medicine perspective to service integration and team-based organisations supportive of coordinated care within Community Oriented Primary Care practice

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OUTLINE

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Introduction

- The use of data generated through routine health information systems is an effective health system pillar for achieving improved service utilisation performance. [1,]
- Data use practices can lead to improvements in health service efficiencies, health system efficacy and clinical outcome indicators. [2]
- Integrated health system collaboration across disciplines and platforms of services delivery can facilitate the engagement of institutional data in support of health service impact. [3]
- Referral policy implementation in context of PHC reengineering [4]

Care Coordination and Team Based Care

- Team-based care organisation for Primary Health Care Performance Initiative [5]
- Definition of care coordination [6]

Common element	**Phrase from our working definition**
Coordination has a purpose or goal	**“the deliberate organization...to facilitate the appropriate delivery of health care services”**
Numerous participants involved in a patient's care	**“organization of patient care activities between two or more participants involved in a patient's care”**
Adequate knowledge about available resources and participants' roles	“organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities”
Information exchange among participants	“managed by the exchange of information among participants”
Coordination is necessary when participants are interdependent	“participants responsible for different aspects of care”

Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies (Vol. 7: Care Coordination).
Technical Reviews, No. 9.7.
McDonald KM, Sundaram V, Bravata DM, et al.
Rockville (MD): Agency for Healthcare Research and Quality (US); 2007 Jun.

Aim and objectives

1. Identify and describe specific care-pathway frameworks for cases within the internal medicine department from May to July 2019.
2. To use care-pathways and interprofessional team participation to facilitate and coordinate integrated patient-focused care pathways of acute cases towards COPC rehabilitation and comprehensive care.
3. To link average length of stay (ALOS), bed-occupancy rates (BORs) and cost per patient day equivalent (CCPDE) in the medicine department to car coordination activities.

Methods

- Cross-sectional project adopted rapid appraisal mixed methods using service utilisation trends to monitor and report on team-based care pathways.
- Nested within subobjectives of larger Community Oriented Primary Care Research Project (Ethics:)
- Qualitative data were collected through observations, post ward round reflections from members participating in weekly interprofessional clinical rounds, at the 3 main hospital complex.
- Quantitative data were collected retrospectively from operational reports and clinical records at ward level.
  - Length of admission
  - Diagnosis/ Diagnoses (ICD10)

Observation and description of process for Care-pathway Framework for Rehab and Palliative Care Patients

Ward rounds (Weekly Tuesdays, Thursdays 08:30 – 09:30)

Identification of patients “blocking beds”. i.e. where discharge plan is either unclear or inadequately implemented.

Multi-disciplinary interprofessional decision making providing directed action plan (with measurable timelines). Effective and efficient clinical escalation process.

Care-pathway Framework for Rehab and Palliative Care Patients

Multi-disciplinary team composition currently

- Internal Medicine Clinical Management: Clinical executive and nursing management for Medicine (SBAH)
- Social workers
- Internal Medicine: HOD or HOU
- Family Medicine: HOD, Fam Med registrars, OT, COSUP, PT (including district health team)
- Public Health Medicine: Specialist, registrar (SBAH)

Multi-disciplinary team composition ideally (should also include)

- Palliative Care and Rehab Clinicians, Clinical Associates, Healthcare Practitioners, WBOT district coordinator
- Clinical pharmacists (Polypharmacy)

Provisional results: Qualitative Description

- Between 1 May 2019 – 31 July 2019
- Approx. 4 – 8 patients escalated weekly in department for interprofessional team
- Fully described care pathways (mapping movement and consultations)
  - Rehabilitation
  - Palliation
  - Wound
- Partially described care pathways (mapping)
  - Mental health (substance use)

Care-pathways Described with the Tshwane District

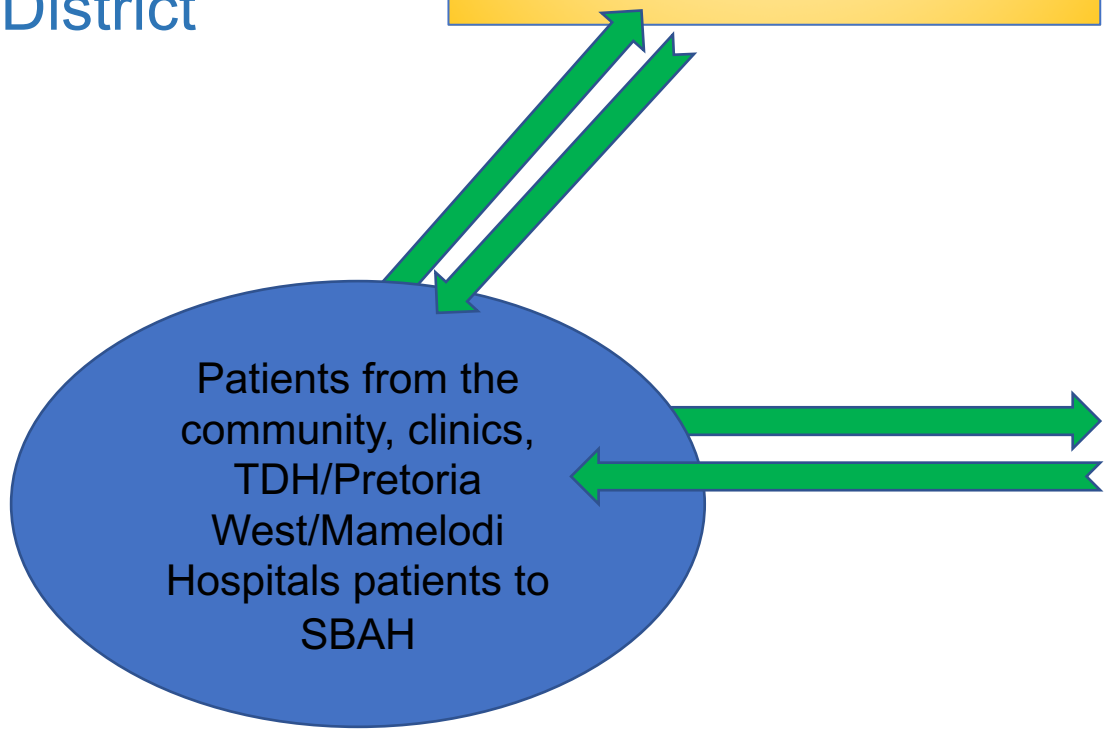
Palliative care –

Palliative Care Centre vs.

Hospice vs.

Home-based (with WBOT support)

A communication and feedback mechanism between clinicians at all levels, where information is shared and actioned is based on integrated .



Rehabilitation -

Regional/ District hospital vs.

Specialized rehab hospital vs.

Home-based/ PHC-based (with District Rehab Team support)

Case scenario example – Management Round 8 May 2019

- 38 y.o. female, Left ACA infarct, Rt hemiparesis. Aphasic.
- Newly diagnosed HIV not on HAART. Needs counselling to begin ART.
- Admitted 14 March 2019
  - Length of stay 56 days
  - @R5482,44 per day
  - R307 016,64
  - Excl. Investigations (such as NHLS tests, CT Angio, Carotid US doppler, Stenting, Cost of HR,)

- Rehab Candidate
- Mx round plan:
  - Exclude DVT & follow up CTB once done, refer to TRH.
  - Needs speech, physio & OT assessment and support prior to discharge
  - Include family in decision-making plan and process. May need home-based rehab after acute phase.
- Outcome:
  - Consent to initiate HAART
  - Home based care support (District Rehab Team)

Case scenario example – Management Round 30 May 2019

- 51 year old female, AdenoCa (Metastatic) – Primary under investigation
- Date of Admission (6/4/2019) – LOS (48 days) = R 263 157,12
- Investigations = R?
  - CTB contrast, x-ray right & left knee, right & left knee CXR
  - FBC, U&E, LFT, CMP, INR, PTT (6th, 8th & 15th April)
- Medications = R?
- Developed contractures in the bed

- Palliative Care Candidate
  - Does she need medical oncology?
  - If not to initiate palliative support.
- Mx round decision:
  - Discussion with family
  - Move to Home-based care/ Hospice facility
- Outcome:
  - Not for chemo. Additional investigation deferred.
  - Family were willing to facilitate palliative process. Called hospice. Patient moved to hospice care 1 week after round.

Improved Engagement. Feedback. Action

Ward sisters comments:

- “No patients were blocking beds today” – Sister in ward 1
- “10 empty bed over the weekend” – Sister in ward 2
- Only 4 priority patients with unclear decision paths identified.

Meetings and further coordination

- Interprofessional person- centred assessment and referral tool to assist early coordinated decision making and care pathway planning.
- List of District Rehab Coordinator and sub-district coordinators and clinical teams

Improved engagement. Feedback. Action.

Engagement with broader clinicians

- Request to present findings at Medical Department's Combine Departmental Committee Meeting.
- Identifying new care pathways creating bottlenecks in the upward and downward referral of patients

Exchange of information

- Patients presented now at 2 – 3 weeks LOS (some as early as 5 days post-admission)
- Presentation to Tshwane district mangers at MDT Masterclass (interest shown in supporting platform and in-service training opportunities)

Discussion: Service and Care Bottlenecks

- Within Hospitals
  - Complexity of health system – sub-speciality interactions in Hospital Services
  - Communication, Information sharing, Service burden, Collective decision-making
  - Care Teams (feasibility and need)
- Beyond Hospitals
  - Complexity of health system – multiple stakeholders in District Health System
  - Information and contact details of stakeholders and professionals, referral challenges
  - Care Teams (feasibility and capacity)

Conclusions & Recommendations

- Wound care framework (Workshop 22 August)
- Mental healthcare & COSUP program framework
- Renal care, i.e. peritoneal and haemodialysis
- Cardiology care (PHC to Central Hospital, then back)

Conclusions & Recommendations

- SBAH Care-coordination and Care Team guidelines
- Care pathway in-service training schedule for the Tshwane Health District
- Building a culture of Team-based clinical care coordination within the Tshwane Health District
- Health system integration. Clusters and sub-district engagement

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THANK YOU FOR YOUR ATTENTION

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