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Establishing a Pharmacist-led Transitions of Care (TOC) Clinic

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Disclosure Information



- I have no financial relationships to disclose
- I will not discuss off label and/or investigational use of drugs in my presentation

Learning objectives



- Define the process of care transitions of patients
- Discuss pharmacist workflow pertaining to TOC
- Describe an approach to establishing a pharmacist-led TOC clinic
- Identify ways to measure patient outcomes pre and post pharmacist intervention

TOC definition



- Movement of a patient from one setting of care to another¹
- Settings of care may include hospitals, ambulatory (primary or specialty) care practices, long-term care facilities, home health, and rehabilitation facilities
- Also applies to changes in level of care

Relevance



- Preventing costly readmissions and containing health care costs is in the forefront of international concerns
- Payers, patients, providers, and quality regulators share a common goal of optimizing care
- Medication related hospital readmissions up to 60% described in the literature³
- Care transitions with a focus on medication management are well known to improve health outcomes

ORIGINAL ARTICLE

 OPEN ACCESS
 

Readmission rate reduction strategies in general hospital setting

Almunzer Zakaria^a, Carol-Anne Faint^b and Sara Kazkaz^a

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ABSTRACT

Hospital readmissions are vital to patients, families, healthcare providers, and policymakers throughout the world. However, limited information is available about strategies to prevent readmissions in Qatar and the Middle East region in general; hence, there is a gap in business practice. The objective of this study was to explore the strategies used by hospital leaders and administrators in managing and reducing patient readmissions.

ARTICLE HISTORY

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KEYWORDS

Readmission; hospital; strategy

Study Design	Location	Objective(s)/Endpoint(s)	Results/Findings
Retrospective chart review, interviews ⁴	Qatar	To review trends in hospital readmissions and explore the strategies used by hospital leaders and administrators in managing and reducing patient readmissions	3 strategies undertaken by the hospital to address high rates of readmissions: <ul style="list-style-type: none"> • Discharge planning and patient education through Re-Engineered Discharge (RED) program • Medication reconciliation services • Effective follow-up system (scheduling timely appointments and follow-up phone-calls)

original article

The outcome of pharmacist counseling at the time of hospital discharge: an observational nonrandomized study

Sami Ali Al-Ghamdi,^a Mansour Adam Mahmoud,^b Maha Abdalaziz Alammari,^a Abdulkareem Mohamed Al Bekairy,^a Muneera Alwhaibi,^b Ahmad Yacoub Mayet,^b Hisham Saad Aljadhey^b

Study Design	Location	Objective(s)/Endpoint(s)	Results/Findings
Prospective, nonrandomized observational study (over 3 months) in a 1000-bed tertiary hospital ⁵	Saudi Arabia	To assess a program involving comprehensive medication counseling provided by pharmacists at the time of discharge from a tertiary hospital	<ul style="list-style-type: none">• Patients discharged from the internal medicine wards with more than three medications received comprehensive pharmacist counseling• The incidence of ADEs 2 weeks after discharge were reduced

Original article

Student-Led discharge counseling program for High-Risk medications in a teaching hospital in Saudi Arabia: A pilot study

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Study Design	Location	Objective(s)/Endpoint(s)	Results/Findings
Open label randomized controlled trial in an academic medical center on adults discharged on warfarin, insulin, or both (pilot project) ⁶	Saudi Arabia	To evaluate the effects of pharmacy students-led TOC interventions on 30-day hospital readmission rates and relevant disease-state metrics	<ul style="list-style-type: none"> Intervention group received med rec at the time of discharge, a patient interview and counselling, a 72-hour follow-up phone call, and a 30-day follow-up phone call by pharmacy students The 30-day hospital readmission rate was lower in the intervention group Better patient satisfaction reported with the TOC service

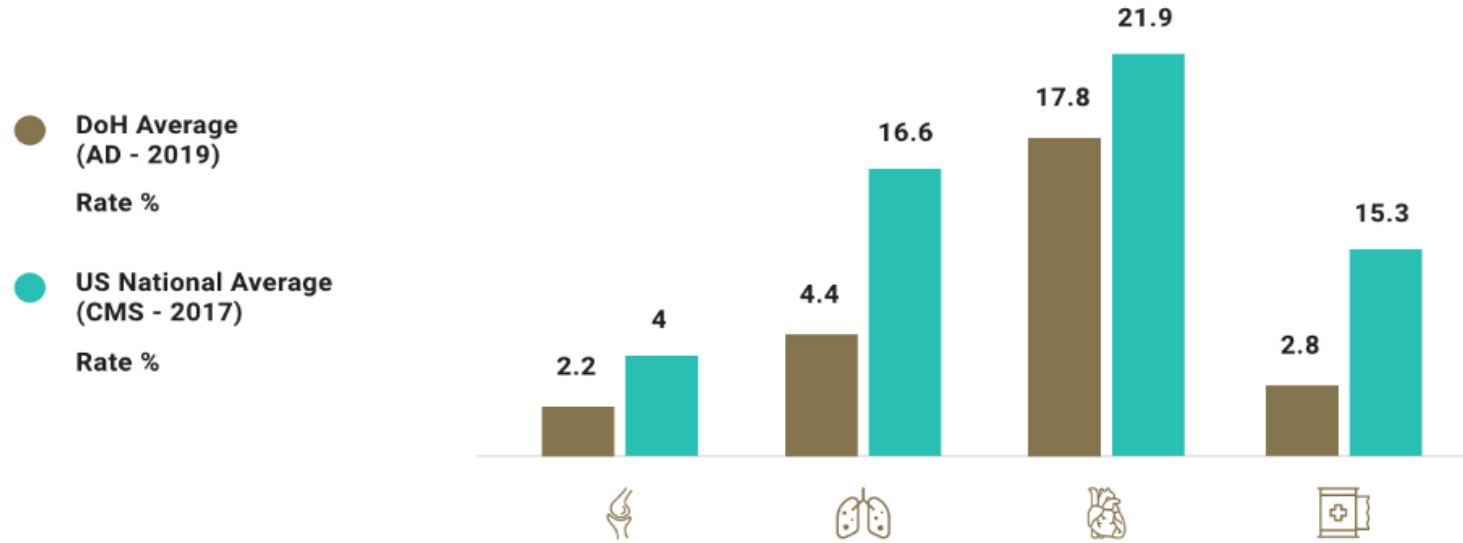
The UAE

- JAWDA (translates to quality): Department of Health's star rating system⁷
 - Aims to improve services and patient health
 - Hospitals are rated according to indicators including patient safety, effectiveness of care, waiting time and the level of treatment provided

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The UAE - JAWDA



Unplanned Hospital Readmission



30-day all-cause readmission rate for patients with planned Primary Knee-Replacements procedure.



30-day all-cause readmission rate for patients with Pneumonia.



30-day all-cause readmission rate for patients with heart failure.



30-day all-cause unplanned hospital readmission rate for medical and surgical patients.

Current workflow



- Admission medication histories
- Discharge medication reconciliation
- Discharge counseling within a “meds to beds” service
- In-house outpatient pharmacy

Step-wise approach to expand TOC services

Target population



- Screening for medical, behavioral and social factors associated with high-risk for poor transitions
- *Frequent facility admissions and/or inappropriate utilization of health care resources*
- Polypharmacy
- Multiple co-morbidities on chronic medications
- Specific conditions/population
- Incorporating predictive risk model (such as risk score)

Identification tool



- Custom built report
- Custom risk score in electronic medical record
- May include admission diagnosis, number of medications, etc....

Example report



Inpatients with Readmissions

Department	Room	Diagnosis	Service	LOS in Days	# of Readmissions in the past 30 days	# of Readmissions in the past 365 days
8 HAD	814	Dehydration [276.51]	Medical ICU			
14 HAD	1429	Incisional hernia, without obstruction or gangrene [K43.2]	General Surgery			
12 HAD	1209	Cholecystitis [575.10]	Hospital Medicine Service			
15 HAD	1526	Tension headache [307.81]	Heart Failure and Transplant Cardiology			
17 HAD	1729	Respiratory failure [518.81]	Neurology			
11 HAD	1102	Epigastric abdominal pain [789.06]	Hospital Medicine Service			
16 HAD	1603	SIRS (systemic inflammatory response syndrome) [995.90]	Pulmonology			
11 HAD	1130	Hyponatremia [276.1]	Hospital Medicine Service			
6 HAD	622	Null	Medical ICU			
14 HAD	1419	Rectal cancer [154.1]	Colorectal Surgery			
17 HAD	1724	Hydrocephalus [331.4]	Neurology			
11 HAD	1135	Null	Hospital Medicine Service			
8 HAD	822	CKD (chronic kidney disease) stage 4, GFR 15-29 ml/min [585.4]	Medical ICU			

Date
Yesterday

Date Range
1/1/2020 4/10/2021

of Readmissions in the past 365 days
0 13

of Readmissions in the past 30 days
0 3

Diagnosis
(All)

Department
(All)

Sort BY
 # of Readmissions in past 365 days
 # of Readmissions in past 30 days
 LOS in DAYS

Sort Order
Desc

Example score



The screenshot displays a patient summary dashboard with the following components:

- Navigation Bar:** Summary (selected), Chart Review, Manage Orders, Notes, Results Review, History, Admission, Discharge, Malaffi, Intake.
- Summary Section:** Overview (selected), Index, EWS, Handoff, Flowsheet, Labs, Vitals Min/Max, Weight, Radiology, Micro, Ticket To Ride.
- Alert:** Patient at Low Risk of Unplanned Readmission (highlighted in green).
- BestPractice Advisories:** Click to view active BestPractice Advisories.
- Vital Signs:** Includes a graph and a table of temperature readings.
- Intake/Output:** Includes a table of oral intake (P.O.) data.

Parameter	17/05 07:00	18/05 07:00	18/05 06:59	18/05 10:06	Most Recent
Temp (°C)	36.6 - 37	36.5	37	36.5	36.5 (97.7)

Parameter	16/05 07:01	17/05 07:01	18/05 07:01	19/05 07:00
P.O.		150		

Exclusion criteria



- Receiving home health care
- Discharging to a long-term care facility
- Transplant
- Oncology

Establish interventions



- Detailed admission medication history
- Optimized discharge medication reconciliation and counseling
- Schedule for outpatient follow-up within 7 days in TOC clinic
- Discharge progress note in chart

Multidisciplinary collaboration

- Quality team
- Physicians
- Pharmacists
- Nursing team
- Health unit/patient service coordinators

Physical location of visit

Virtual/phone encounters

Payer

Data collection



- Establish a way to identify patients that receive intervention
- Determine outcome measure (30-day readmission, ED utilization, etc.)
- Quasi experimental (retrospective)
- Historical control group as comparator (service, payer, condition, etc.)

Outcome measures



For intervention group post discharge

- 30-day readmission
- 30-day ED utilization
- 30-day ambulance use
- Primary care encounters

Common barriers



- Financial
- Staffing
- Transfer of information across settings
- Communication

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Questions