Standardizing an Emergency Room Medical Assessment Stability/Clearance Protocol for Quality Improvement: A Pilot Collaboration between Emergency Medicine and Mental Health Professionals

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Abstract

Title: Standardizing an Emergency Room Medical Assessment Stability/Clearance Protocol for Quality Improvement: A Pilot Collaboration between Emergency Medicine and Mental Health Professionals

Purpose of Study:
We aimed to initiate a standard protocol for use in patients with psych presentations in the emergency department that would improve patient safety, reduce unnecessary costs, provide structural immunity to stigma and clinical cognitive errors, facilitate inter-professional team functioning with role and responsibility clarification, and reduce conflict in the high fidelity, high stress, acute environment of an emergency room. We describe preliminary results and experiences in the development and pilot of this protocol.

Statement of Methods:
Our methods follow a quality improvement framework. After reviewing the relevant literature, we met with departmental leadership and stakeholders to reach a consensus on the most appropriate protocol for our institutions and to promote engagement. We then went on to pilot the protocol at North York General Hospital and Humber River Hospital and formally collected feedback from clinicians involved. Our next steps are to gather further feedback and to revise our methods based on this data.

Results:
Twelve emergency room physicians from North York General Hospital provided feedback from the pilot project using written surveys that contained both yes/no questions and space for comments. Preliminary data indicates that while all physicians believed the protocol is complete and half found it to be user friendly, only 3/12 believed that the tool will lead to decreased variability in determining whether a patient is medically stable and only 2/12 physicians felt that the tool will facilitate transfer between services. However, qualitative feedback from HRRH was the opposite—staff felt the protocol was valuable.

Conclusions
Our case demonstrates that emergency care demands high inter-professional collaboration and is at times characterized by conflict and unclear roles and responsibilities amongst services and teams, particularly in the intersection between mental and physical health. Providers have differing clinical judgments of whether physical examination is required, what laboratory investigations are needed, and what constitutes medical stability. There is also disagreement on methods to reduce this variability and on whether changes are required.
We provide suggestions for how to manage these conflicts and engage in ongoing quality improvement to promote best practices. Our process is ongoing and we hope to invite discussion and further collaboration among clinicians working with these complex patients.

Summary of Pilot Implementation

IDENTIFIED PROBLEM

Concern re: reduced quality of care for psych patients in the ED based on clinical experience and evidence from the literature (see "What is the Evidence?")

PLANNING PHASE (2013-14)

-Convened small working group of psych and ED leadership (NYGH and HRRH)

-Performed literature review

-Elicited feedback from stakeholders (ED and psychiatry leadership and front-line staff)

-Involved Central Local Health Integration Network (CLHIN) to promote engagement and circumvent institutional stigma

-Adapted potential protocol from one available in the literature for use in psych patients being transferred from ED (first draft Jan, 2014)

ACTION (March 3-April 4, 2014)

-3 week pilot of draft protocol at 3 hospitals in the CLHIN using quality improvement framework. One hospital later dropped out, leaving NYGH and HRRH

-Population: all patients (adult and children) presenting to hospital with a mental health issue and requiring external transfer/admission

ASSESSMENT (May, 2014)

-Elicited feedback from ED physicians re: protocol during action phase

-May 1, 2014: Pilot results shared with pilot sites and working group

-May 22, 2014: Protocol revised based on feedback and final version distributed to hospitals

NEXT STEPS

-Ongoing improvement of protocol based on feedback

-Use HRRH as a model of successful implementation for the rest of the LHIN

-Include Medical Stability Checklist in the Bed Registry Protocol document

Thanks to Ashley Hogue from the Central LHIN for assistance in developing the flow sheet and compiling data

What is the Evidence?

- No evidence that routine laboratory investigations change disposition of psychiatric patients in the ED in the context of appropriate histories and physical exams[1]
- The American College of Emergency Physicians' (ACEP) clinical policy suggests that testing should be guided by history and physical/mental status exam: "Routine laboratory testing of all patients is of very low yield and need not be performed as part of the ED assessment"[2]
- Limited evidence that routine urine drug screening affects management in the ED beyond self-report, but adds to wait-times[3]
- Evidence that diagnostic overshadowing/stigma may contribute to reduced quality of care for patients with a psych history presenting to the ED[4]
- Limited literature re: the use of med stability protocols. Evidence that they are cost-saving[5]

Protocol: Mental Health Medical Stability Checklist

Child/Adolescent and Adult
Emergency Department Transfer to Mental Health/Addictions Inpatient Unit
MENTAL HEALTH MEDICAL STABILITY CHECKLIST

1)	Is this the first presentation of a psychiatric/mental health/ psychotic problem?	□Yes	□ No
2)	Abnormal physical exam? (A physical exam must be done)	□Yes	□ No
3)	New physical complaint (s)?	□Yes	□ No
4)	History of active or chronic medical illness needing evaluation?	□Yes	□ No
5)	Significantly abnormal vital signs?	□Yes	□ No
6)	Altered level of consciousness or fluctuating mental status?	□Yes	□ No
7)	Evidence of intoxication or withdrawal or known history of substance abuse?	□Yes	□ No
8)	Suspicion of pregnancy?	□Yes	□ No
9)	History of malignancy?	□Yes	□ No

If no to all of the above questions consider no further investigations and proceed to question #11

If yes to any of the above questions, use clinical judgment to consider which if any further investigations are required.

10) Investigation ordered (if indicated):

• Laboratory Test (CBC, Electrolytes, Urea, Creatinine, Osmol, ETOH, ASA, Acet., Beta, HCG (for female patients)	□Yes	□ No
• Urine Toxicology	□Yes	□ No
• ECG	□Yes	□ No
• Diagnostic imaging	□Yes	□ No
• Other	□ Specify: _____	

11) Medications reviewed (and ordered if appropriate)? □Yes □ No

Patient's medical condition is sufficiently stable for transfer/admission to a Mental Health Inpatient Unit?
□Yes □No

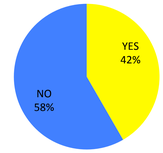
Treatments Done in the ED & Additional Comments

Completed by: _____ (Physician Signature) _____ (Printed Name Ref Number) _____ (Date) _____ (Time)

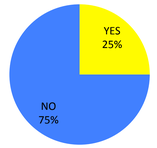
(Adapted from Zun LS, Downey L, Primary Care Psychiatry, Vol 14, No 11, 2007)

Feedback from ED Staff

N=12 ED Physicians at NYGH; Collected at weeks 3 and 4 of protocol initiation

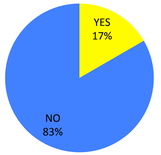


User friendly?



Will tool contribute to decreased variability in determining medical stability?

Relevant tests/questions missing?



Will tool help improve transfer of care between services?

Qualitative Feedback (NYGH):
-Questions vague
-Physical exam should be done at physician's discretion
-Tool does not allow for clinical judgment (unanimous opinion)
-Prescriptive nature means that some medical concerns may be missed
-Too many forms already for mental health patients
-Not clear why tool is even required
-May be acceptable for use in transfers only (not all mental health patients)

Qualitative Feedback (HRRH):
-Staff found protocol quite helpful and believed it will help with interprofessional communication and decrease variability in determining medical stability. They are thinking of using it for all psych admissions!
-Possible reason: cost-savings due to fewer lab tests (performed more routinely at HRRH than NYGH)

Challenges

- Individual and institutional stigma involving patients presenting with mental health/ behavioural concerns
- Differences in ED and psychiatry cultures
- Differing resources (e.g. ease of performing blood work on psych units vs. ED)
- Tests that guide initial psychiatric management (e.g. urine tox) may not change ED management→ conflict over whether testing should be done in ED

Conclusions

- Medical stability protocols provide a means of standardizing quality of care for patients with psych presentations in the ED
- The protocol developed for NYGH and HRRH is appropriate for use in external transfers but may be too burdensome for use in all psych admissions
- It is clear from this process that different ED's may have vastly different needs based on the practices and cultures of the institutions. This area requires a high degree of interprofessional collaboration
- More research is needed on the utility of med stability protocols in improving patient quality of care, wait times and costs

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